
Meridian Administration Tools

Common Services

User Guide

Document Number: P0876405
Document Release: Standard
Date: July 1998

© 1997, 1998
All rights reserved

Printed in the United States of America

Information is subject to change without notice. Northern Telecom reserves the right to make changes in design or components as progress in engineering and manufacturing may warrant. This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC rules, and the radio interference regulations of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Meridian 1 is a trademark of Northern Telecom.

Document Revision history

Date	Document Version	Product Release
July 1998	Standard	6
October 1997	Standard	5.7
July 1997	Preliminary	5.7
May 1997	Standard	5.6
February 1997	Preliminary	Pre-release 5.6
September 1996	Standard	5.01
September 1996	Standard	5.00
May 1996	Standard	4.0
February 1996	Preliminary	Pre-release 4.0 for field trials
November 1995	Preliminary	Pre-release 4.0 for testing
December 1994	Standard	2.0
June 1994	Standard	1.0

Contents

Introduction	1
MAT users	2
Conventions used in this guide	3
Configuring Sites, Systems, and Users	5
Changing the default login password	5
Site and system administration	7
Meridian Passport site and system administration	7
Adding a site	8
Adding a system	10
Changing site information	24
Changing system information	25
Deleting a site or system	26
Changing your password	26
Configuring MAT users	26
Creating a user template	27
Adding a user	29
Deleting a user template	30
Restricting user access permission levels	30
Sites and systems displayed in user templates	30
MAT Navigator and System Window	31
Using Navigator	32
Logging in and launching the Navigator	34
Navigator menus	35

Toolbar	35
Status Bar	36
Using MAT Scheduler	37
Accessing Scheduler	37
How the Scheduler works	38
Configuring and scheduling a job	40
Example job configuration	41
Device contention	42
Scheduler menus	44
Queue Manager	44
Accessing Queue Manager	45
Configuring a queue	46
Using Corporate Directory	47
Defining and generating reports	47
Using Backup and Restore	49
Media, files, and data types	49
Benefits	51
Running the Backup utility	53
Running the Restore utility	53
Using Alarm Notification	55
Working with the System Window	57
System Window menus	59
Toolbar	59
Using Electronic Data Dump	61
Synchronizing and securing data	61
Accessing EDD	62
Responding to a connection failure	64
Using System Terminal	65
Launching System Terminal (Ethernet or PPP required)	66

System Terminal window	67
Using System Terminal	68
Advantages over a TTY	68
Getting help on the current overlay	68
Example	69
Getting help on the current prompt	69
Getting help on an error message	70
System Terminal menus	71
Toolbar	71
Using the I/O Navigator	71
VT220	75
Features	75
Accessing VT220	76
File menu	78
Edit menu	78
Configuration menu	79
View menu	80
Terminal menu	81
Help menu	81
Keyboard mappings	82
Using PC Event Log	87
Using the PC Event window	87
Launching and using the PC Event window	87
Filter toolbar checkboxes	88
Learning more detail about an event	88
Script File Summary	89
Common Services scripts	89
Traffic Analysis scripts	90
Call Accounting and Call Tracking scripts	92
Script usage table	97

List of figures

Figure 1	
MAT Components	1
Figure 2	
Change Password dialog	6
Figure 3	
New Site Properties sheet	8
Figure 4	
Add System dialog box	10
Figure 5	
System Properties—General tab	11
Figure 6	
Add Communications Profile dialog box	12
Figure 7	
System Properties—Communications tab	13
Figure 8	
System Properties—Communications tab—Ethernet Profile	14
Figure 9	
System Properties—Communications tab—PPP Profile	15
Figure 10	
System Properties—Communications tab—Serial Profile	16
Figure 11	
System Properties—System Data tab	17
Figure 12	
System Properties—Applications tab	19

Figure 13	
System Properties—Customers tab	20
Figure 14	
Customer property sheet, General tab	21
Figure 15	
Customer property sheet, Features tab	22
Figure 16	
Customer property sheet, Numbering Plans tab	23
Figure 17	
MAT Users window	27
Figure 18	
User Templates window	27
Figure 19	
New Template property sheet	28
Figure 20	
New User property sheet	29
Figure 21	
Navigator window	31
Figure 22	
Navigator functions	33
Figure 23	
Login dialog box	34
Figure 24	
Navigator window	34
Figure 25	
Navigator Toolbar	35
Figure 26	
Scheduler window	38
Figure 27	
Queue Manager window	45
Figure 28	
MAT Backup Information dialog box	54

Figure 29	
System window	57
Figure 30	
System window Toolbar	59
Figure 31	
EDD Data Dump dialog box	63
Figure 32	
Connection Failure dialog	64
Figure 33	
System Terminal window	66
Figure 34	
Current prompt help example	69
Figure 35	
System Terminal toolbar	71
Figure 36	
I/O Navigator dialog	72
Figure 37	
Example Help Index for an error message	73
Figure 38	
VT220 window	77
Figure 39	
PC Event window	87
Figure 40	
Filter toolbar	88
Figure 41	
PC Event Properties sheet	88

List of tables

Table 1	
Keyboard mappings - VT key	83
Table 2	
Keyboard mappings - VT action	85
Table 3	
Keyboard mappings - VT action scroll	86
Table A-1	
Script usage table	97

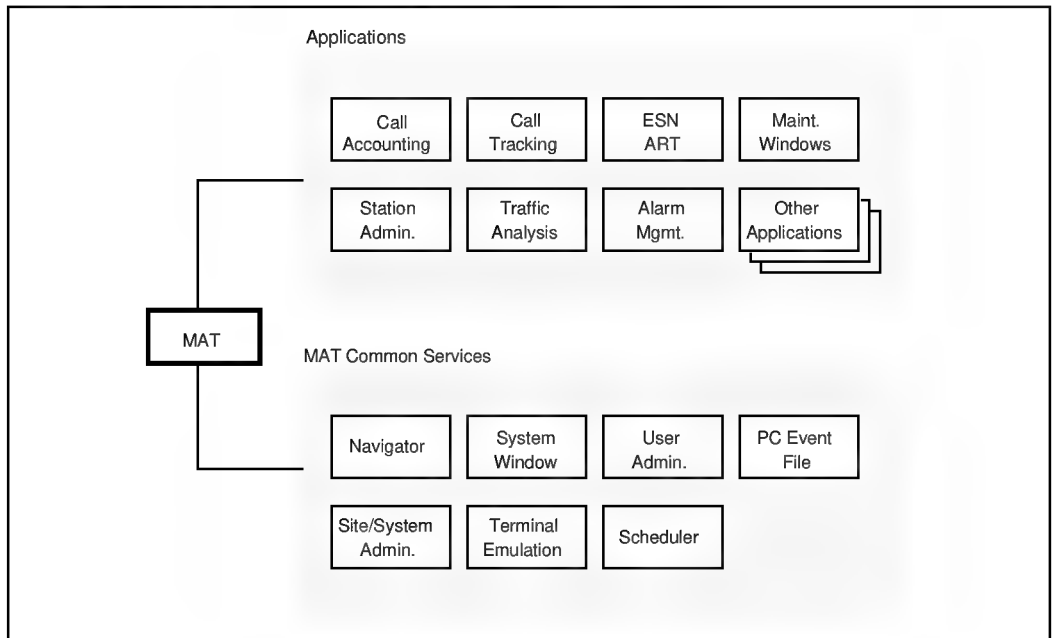
Introduction

This user guide describes how to use the Meridian Administration Tools Common Services.

Note: Even if you have used earlier versions of MAT, you should read this User Guide, as MAT 6 has undergone significant improvement.

Figure 1 shows MAT components.

Figure 1
MAT Components



MAT Common Services provide these applications:

- using the Navigator and System windows
- defining the MAT environment, including Meridian 1 sites and systems
- using the MAT scheduler
- using the system terminal
- using MAT communications services
- communicating between the MAT user and MAT applications with windows displaying system information

MAT users

MAT is designed for telecommunications equipment administrators with a working knowledge of Meridian 1 switches and general telecommunications concepts.

This guide assumes you are familiar with PC systems and the Microsoft Windows 95 and NT 4.0 environment. You should be familiar with the Windows environment before attempting to use MAT.

There are two levels of access to MAT:

- *Administrator* access allows unrestricted use of MAT and its functions. The system administrator configures the MAT system, sets up the connections to the Meridian 1, and defines user access to MAT application modules.
- *User* access allows read only, read/write, or no access to sites, systems, or applications, as defined by the MAT Administrator. The Administrator can create a broad range of access levels for various users.

Conventions used in this guide

This guide uses the following typographical conventions:

- User input—**This font** alerts you to information that you enter on your keyboard; or, using your mouse, this font indicates buttons to click or menu selections to make.
- Multi-lettered keys—Angle brackets denote a single multi-lettered key on your keyboard. For example, **<Esc>** denotes the Escape key, labeled *Esc* on PC keyboards.
- Key sequences—Keys that you press at the same time include at least one multi-lettered key and are not separated by spaces in text. For example, **<Alt>V** instructs you to press the **<Alt>** and **V** keys at the same time.
- Hot keys—You can access menu commands by using the mouse or your keyboard. Menu items show one letter as underlined. To choose a menu item from the keyboard, hold down the **<Alt>** key and press the underlined key. For example, press **<Alt>F** to open the **File** menu.
- *Windows* refers to Microsoft Windows[™] 95 and Windows[™] NT Workstation V4.0.

Configuring Sites, Systems, and Users

This chapter provides instructions for changing the default login password and defining your own MAT sites, systems, and users. Only MAT administrators have authorization to perform these tasks.

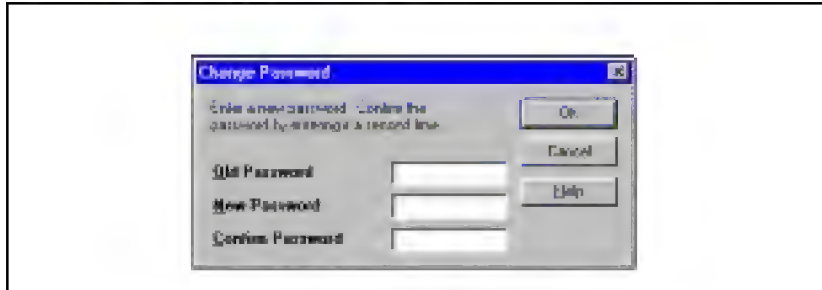
Changing the default login password

The default login password (**Admin**) should be changed immediately after MAT is installed to ensure security. Follow these steps if you have not already changed the password.

- 1 If MAT is not already running, follow these steps to start MAT and login using the default login password:
 - Choose **MAT** from the Programs list in the **Start** menu.
The MAT login dialog box appears.
 - Enter the default system administrator user ID and password:
User ID: **Admin**
Password: **Admin**
Note: For security purposes, the password does not appear as you type it in the Password field.
 - Click **OK**.
After MAT accepts your ID and password, the MAT Navigator window opens.

- 2 In the Navigator window, choose **Change Password** from the **Security** menu to open the Change Password dialog box.

Figure 2
Change Password dialog



- 3 Enter the old password in the Old Password field.
 - 4 Type a new password in the New Password field.
 - 5 Retype the new password in the Confirm Password field.
 - 6 Click **OK**.
 - 7 A message box informs you that the password was successfully changed. Click **OK**.
- MAT will require the new password the next time you log on.

Site and system administration

The system administrator defines the sites and systems that appear in the Navigator window. Sites and systems must be defined before users can connect to a system and perform maintenance tasks. A site typically represents a physical location containing one or more systems. Systems may be defined as Meridian 1 or non-Meridian 1. Meridian Passport is an example of a non-Meridian 1 system. The Navigator **Configuration** menu allows the system administrator to add, change, and delete sites and systems.

Note: For more information about the Navigator and System windows, see “MAT Navigator and System Window” on page 31.

Meridian Passport site and system administration

Use the MAT procedures outlined in the next section to add Meridian Passport sites and systems. Use Meridian Passport Manager (accessible through Navigator) to view the state of Meridian Passport components and current hardware and software, provision components and services, update software, set access defaults and review alarms.

Note: Meridian Passport Manager requires a three-button mouse and uses 60 MB of RAM.

Adding a site

You can add any number of sites to the Navigator window.

- 1 In the Navigator window, choose **Add Site** from the **Configuration** menu. The Site Properties window appears (Figure 3).

Figure 3
New Site Properties sheet

The screenshot shows a 'New Site Properties' dialog box with the following fields and values:

General	
Site Name	General Site
Site Number	S2
Site Location Address	
2875 Mission College Blvd	
City	Santa Clara
State/Province	CA
County	Santa Clara
Zip/Postal Code	95051
Contact Information Name	
Administrator	
Phone Number	408-1234
Job Title	System Admin
Comments	

Buttons: OK, Cancel, Apply, Help

- 2 Fill in the Site Name and Short Name fields (these are required fields).
The **Site Name** appears in the Navigator tree. The Short Name is an abbreviated site name that displays in the Alarm Banner.
- 3 In the Site Location box, fill in the site address information.
- 4 In the Contact Information box, fill in the contact name and related information. Click **Apply**.
- 5 To add a new system to this site:
 - Click **Add System**.
 - Follow the instructions for “Adding a system” on page 10.
- 6 When you have finished entering Site information, click one of the following buttons to add the site to the Navigator tree:
 - **OK** adds the site and closes the property sheet
 - **Apply** adds the site and leaves the property sheet open allowing you to add another system to this site (you may repeat step 5 to add another system)

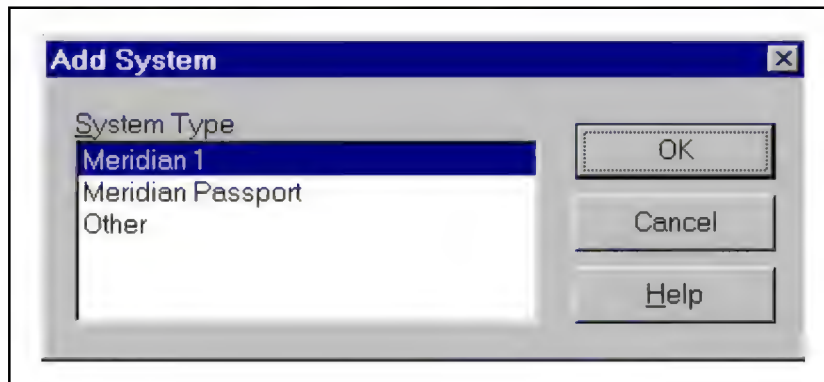
Cancel closes the dialog box without adding the site.

Adding a system

You can add as many systems (including non-Meridian 1 systems) to a site as your license permits. You must have administrator privileges to add a system.

- 1 In the Navigator window, select the desired site.
Note: If you are adding a new system from within the New Site Properties window, skip to step 3 in this procedure.
- 2 Choose **Add System** from the **Configuration** menu or the right mouse button pop-up menu.
- 3 In the Add System dialog box, select the type of system you want to add (for non-Meridian 1 systems, select "Other"). Then click **OK**.

Figure 4
Add System dialog box



- 4 Click the **System Properties—General tab** (Figure 5) enter the System Name and **Short Name** (required fields) and other information as needed. Click **Apply**.

You can make system location and contact information the same as site information by clicking the Same as Site checkbox.

Note: Bolded fields indicate required information. To change a value, edit the field. Some fields may have a list of predefined choices. An arrow within a field indicates a drop-down list of choices. Press the arrow to select from the list. For more detailed information, refer to the online help.

Figure 5
System Properties—General tab

The screenshot shows a Windows-style dialog box titled "New System Properties". It has a tabbed interface with "General" selected. The "General" tab contains the following fields and controls:

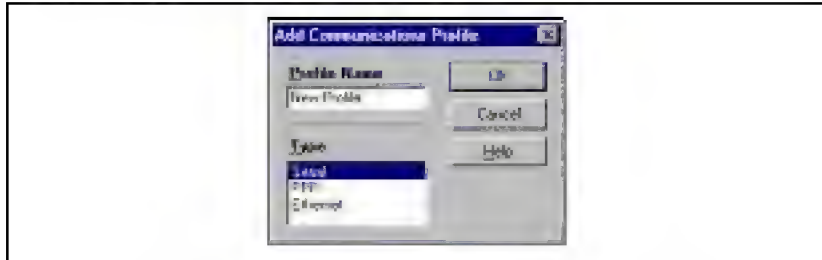
- System Name**: A text input field.
- Short Name**: A text input field, with the label in bold.
- System Type**: A dropdown menu.
- System Location**: A section header.
- Address**: A text input field.
- City**: A text input field.
- State/Province**: A dropdown menu.
- Locality**: A text input field.
- Latitude/Longitude**: A text input field.
- Contact Information**: A section header.
- Manager**: A text input field.
- Phone Number**: A text input field.
- Job Title**: A text input field.
- Comments**: A large text area.
- Same as Site**: A checkbox, appearing twice next to the "Address" and "Manager" fields.

At the bottom of the dialog are four buttons: "OK", "Cancel", "Apply", and "Help".

- 5 To add a new communications profile, the **System Properties—Communications** tab. This tab defines the types of communications profiles that may be applied to system applications (one profile may be used for multiple applications).

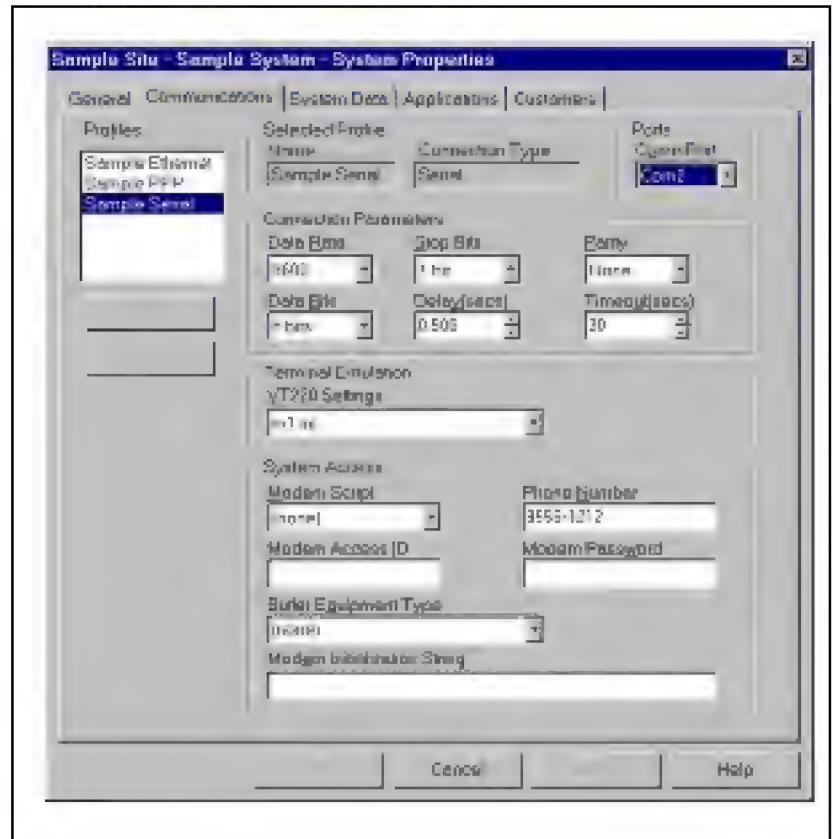
Click **Add**. The Add Communications Profile dialog box appears. See Figure 6.

Figure 6
Add Communications Profile dialog box



Select a communications type from the Type box and enter a Profile Name, then click **OK** to go back to the Communications tab. See Figure 7.

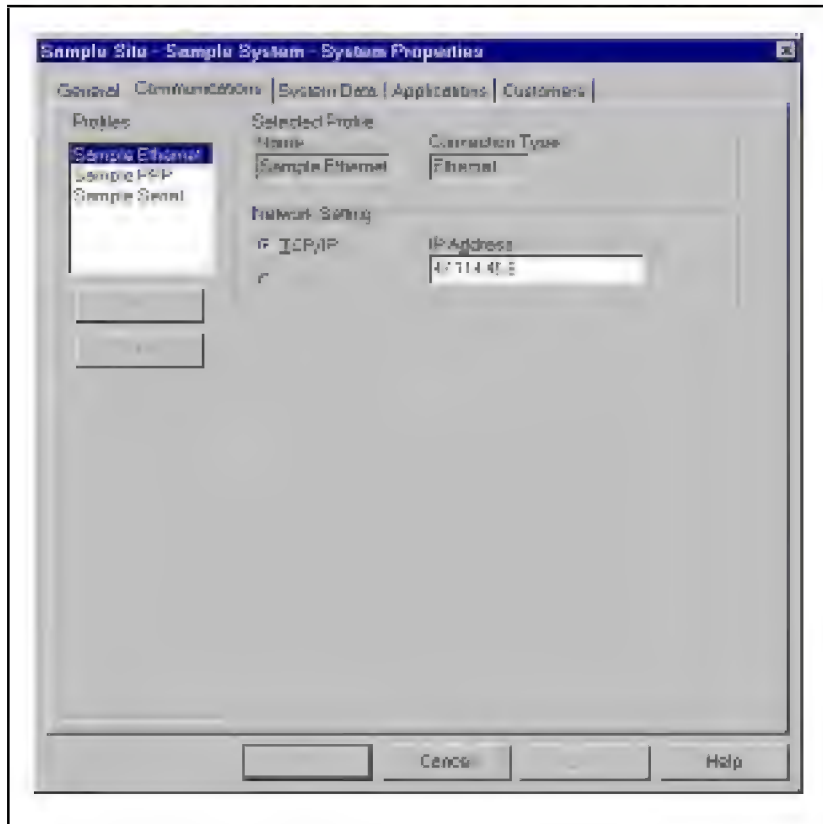
Figure 7
System Properties—Communications tab



- 6 Fill in the communications information for the new profile:

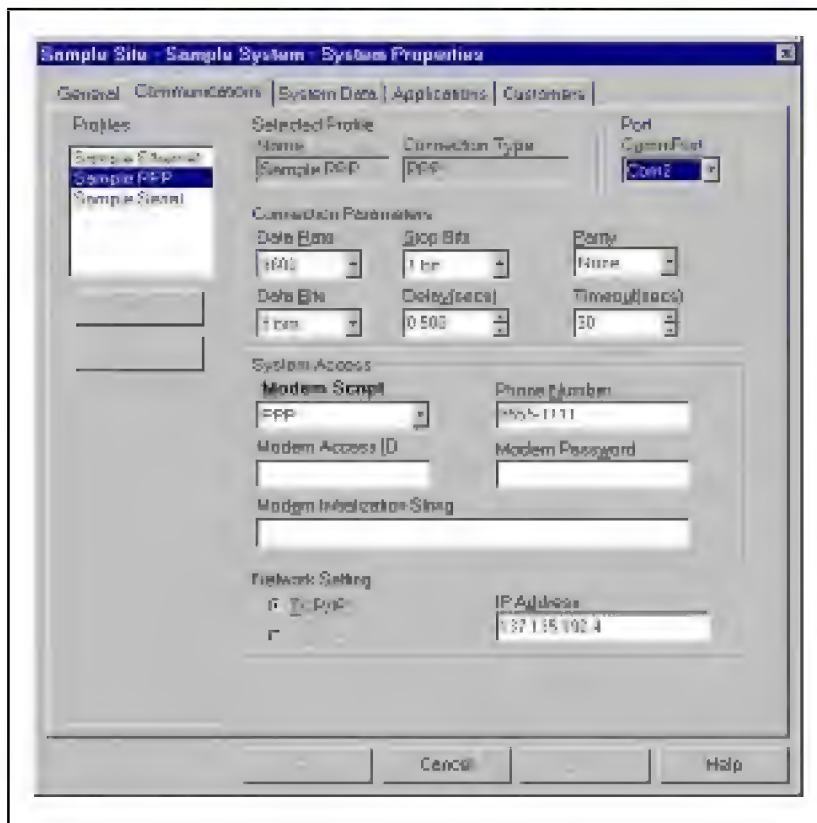
For Ethernet: Select the appropriate network protocol. Enter the IP address that you configured on the Meridian 1. Click **Apply**.

Figure 8
System Properties—Communications tab—Ethernet Profile



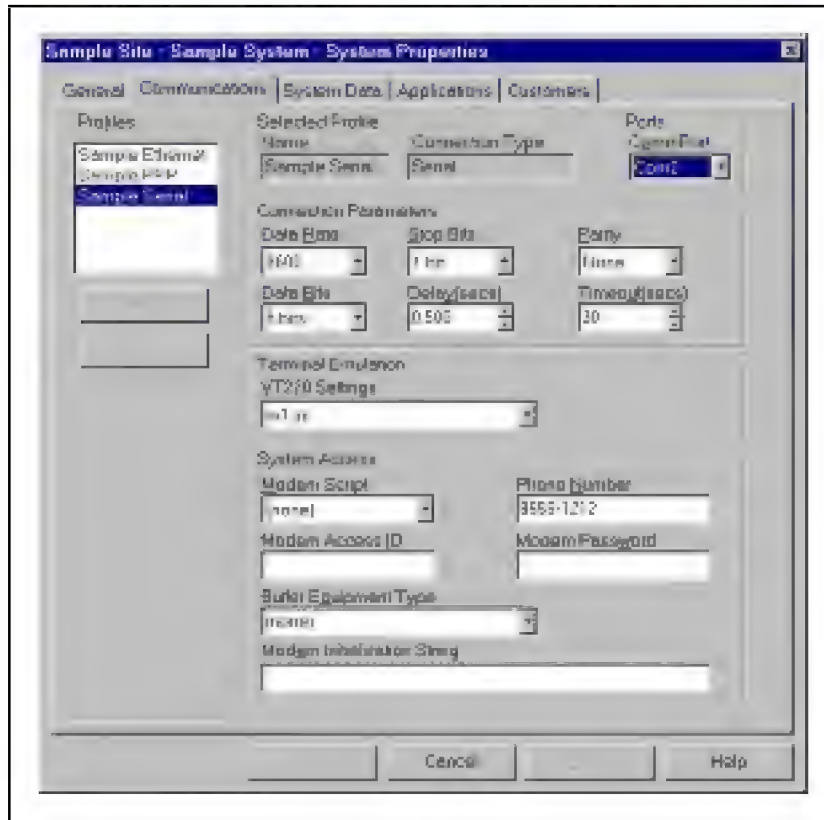
For PPP: Enter all modem parameters and dialup information. Select PPP in the Modem Script text box. Set the IP address to the local IP address, as configured on the Meridian 1. Click **Apply**.

Figure 9
System Properties—Communications tab—PPP Profile



For Serial: Enter all modem parameters and dialup information. Select the appropriate value in the Modem Script text box. This will usually be "None" unless a specific value is defined for your system. Click **Apply**.

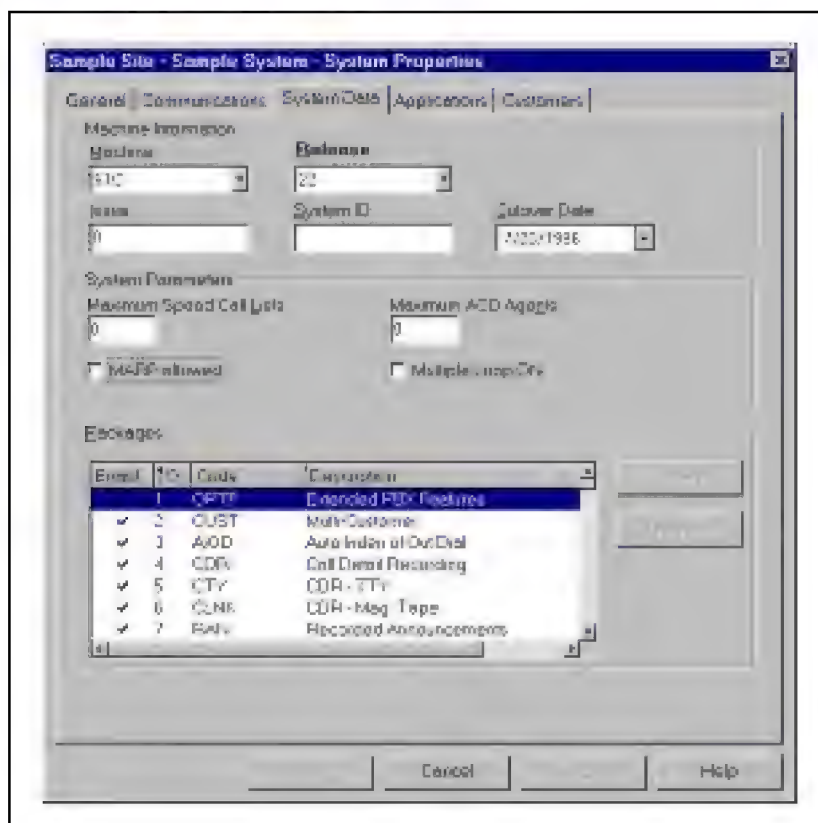
Figure 10
System Properties—Communications tab—Serial Profile



- 7 Click the **System Properties—System Data** tab (Figure 11). Enter the machine/system type and release version for the system and enable or disable M1 packages. For example, if your machine type is the Option 61C Compact, enter **61C Compact** in the Machine field and enter **1** in the Release field.

Note: You can copy this data directly from an installed switch by scheduling an upload with the **File** menu **Update System Data** command in the System window. Update System Data uses the communication profile for Station Administration. However, you should configure the Release number here first to allow available applications to show up properly in the Applications Tab.

Figure 11
System Properties—System Data tab



- 8** Click the **System Properties— Applications** tab (Figure 12).

This tab defines the MAT applications that will appear in the System window and the communications profile to be used with each application. *You must enable an application for it to be available in the System window.*

To enable an application:

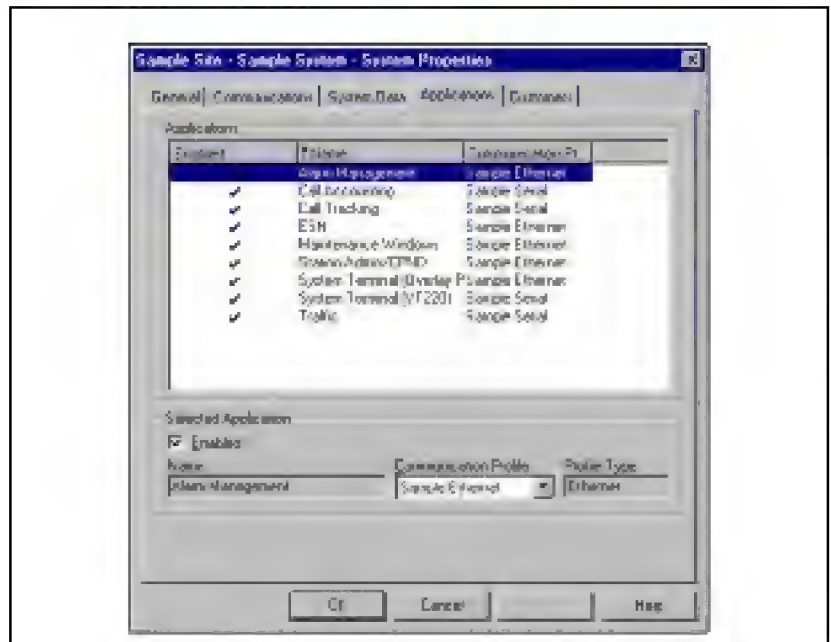
- Select the application in the Applications box.
- Select a Communications Profile from the drop-down list in the Selected Application box.

A checkmark appears next to the application and the Enabled box is also checked.

To disable an application:

- Select the application in the Applications box.
- In the Selected Application box, click the **Enabled** checkbox to remove the checkmark.

Figure 12
System Properties—Applications tab

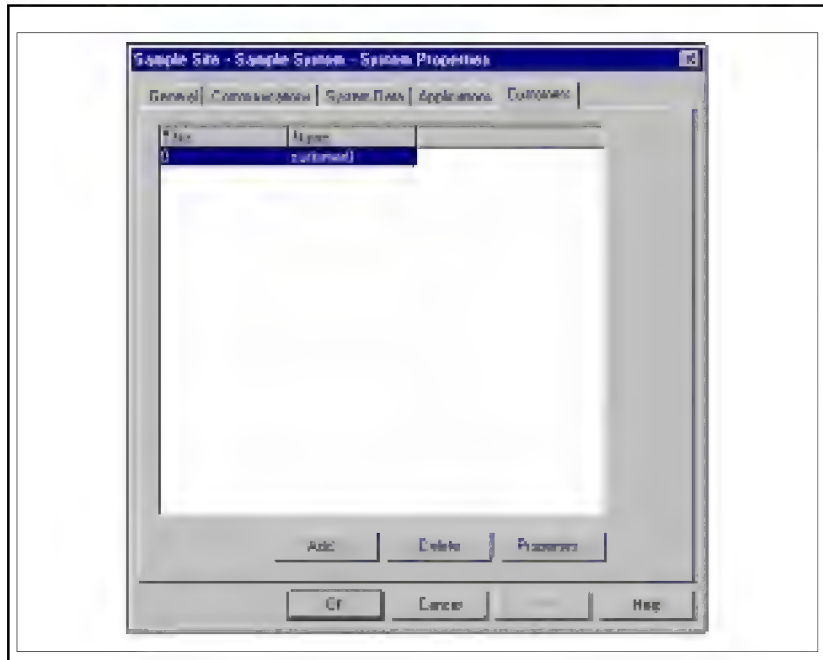


- 9 Click the **System Properties—Customers** tab (Figure 13).

This tab lists the customers currently defined for this Meridian 1 system. You may add new customers, delete customers, or review the properties of a selected customer. When you add a new customer, you configure the Meridian 1 features and numbering plans that are available to the customer. This information it is not automatically updated on the Meridian 1 and must be updated by using LD15 customer data block.

Note: Customer information is required for System Administration/CPND and ESN applications.

Figure 13
System Properties—Customers tab



- 10 To add a customer:
- Click **Add** in the System Properties—Customers tab.
 - Select a Customer number. Click **OK**.
 - Select the **General** tab, in the Customer Property sheet (Figure 14) and fill in the customer information.

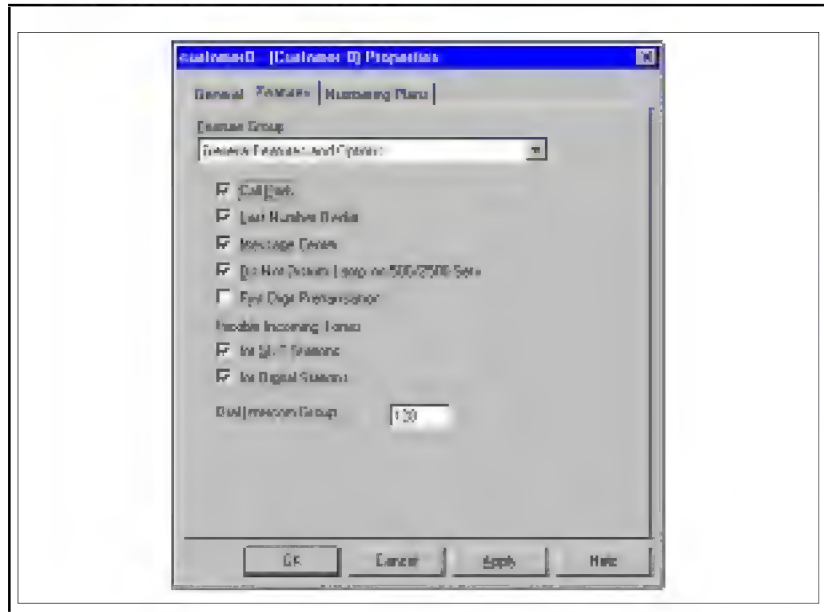
Note: Enter User information in the Scheduler System ID text box if you are using applications with scheduled activities, such as Station Administration/CPND, ESN, Traffic, and Call Accounting.

Figure 14
Customer property sheet, General tab

The screenshot shows a Windows-style dialog box titled "Customer - [Customer ID] Properties". It has three tabs: "General", "Features", and "Numbering Plans". The "General" tab is selected. Inside the dialog, there are several input fields and dropdown menus. At the top, there are two dropdown menus labeled "Customer Name" and "Number". Below these are two text boxes labeled "Directory Number" and "Scheduler System ID". The "Scheduler System ID" section has two sub-fields: "User ID" and "Password". At the bottom of the dialog, there are four buttons: "OK", "Cancel", "Apply", and "Help".

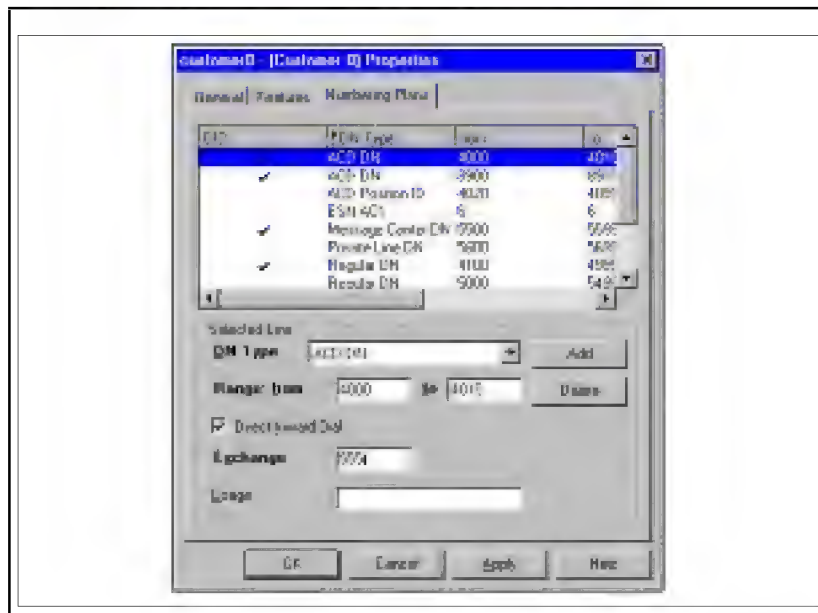
- Select the **Features** tab (Figure 15), and fill in the customer information.

Figure 15
Customer property sheet, Features tab



- Select the **Numbering Plans** tab (Figure 16), and fill in the customer information.

Figure 16
Customer property sheet, Numbering Plans tab



- When you have finished entering customer information, click one of the following buttons to save the information:
 - OK** adds the customer and return to the System properties sheet.
 - Apply** adds the customer and leaves the Customer properties open so that you may add other information for this customer.

Cancel closes the dialog box without adding the customer.

- 11 To delete a customer, click **Delete** in the System Properties—Customers tab. A delete confirmation box opens. Click **OK**.
- 12 To modify customer information, click **Properties** in the System Properties—Customers tab. The Customer property sheet opens. Modify information in the appropriate tabs and click **OK**.

13 In the System properties sheet, click one of the following buttons:

- **Apply** adds the system and leaves the dialog box open.
- **OK** adds the system and closes the dialog box.
- **Cancel** closes the dialog box without adding the system.
- **Help** provides online help.

The new system is added to the tree under the selected site.

Changing site information

You can change any information about a site, including the site name, address, and contact. You must have administrator privileges to change site information.

- 1** In the Navigator window, select the desired site.
- 2** Choose **Properties** from the **File** menu or the right mouse button pop-up menu. The Site Properties dialog box opens to the General tab.
- 3** Bolded fields indicate required information. To change a value, edit the field. Consult the online help for details on any field.
- 4** To add a new system to this site, click **Add System**, and fill in information for the new system. See “Adding a system” on page 10.
- 5** Click one of the following buttons:
 - **Apply** saves the information and leaves the dialog box open.
 - **OK** saves the information and closes the dialog box.
 - **Cancel** closes the dialog box without saving.
 - **Help** provides online help.

Changing system information

You can change any information about a system or its communications connection. You must have Administrator privileges to change any system information.

- 1** In the Navigator window, select the desired system.
- 2** Choose **Properties** from the **File** menu or the right mouse button pop-up menu.
The System Properties window opens.
- 3** Select the tab containing the information you wish to change.
Bolded fields indicate required information. To change a value, edit the field or select a different item from a field popup menu. An arrow within a field indicates a drop-down list of choices. Press the arrow to select from the list. Consult the online help for details on any field.
- 4** Click one of the following buttons:
 - **Apply** saves the information and leaves the dialog box open.
 - **OK** saves the information and closes the dialog box.
 - **Cancel** closes the dialog box without saving.
 - **Help** provides online help.

Deleting a site or system

You must have administrator privileges to delete a site or system from the Navigator window. A record of the deletion is stored in the PC event file.

WARNING: Deleting a site also deletes all of its systems.

- 1 In the Navigator window, select the site or system.

 To delete all sites and systems, select the Sites icon at the top of the tree.
- 2 Choose **Delete** from the **Edit** menu.
- 3 Click **OK** to confirm.

Changing your password

You can change your password at any time. If your password has expired, MAT prompts you to enter a new password when you attempt to log on. Turn to “Changing the default login password” on page 5.

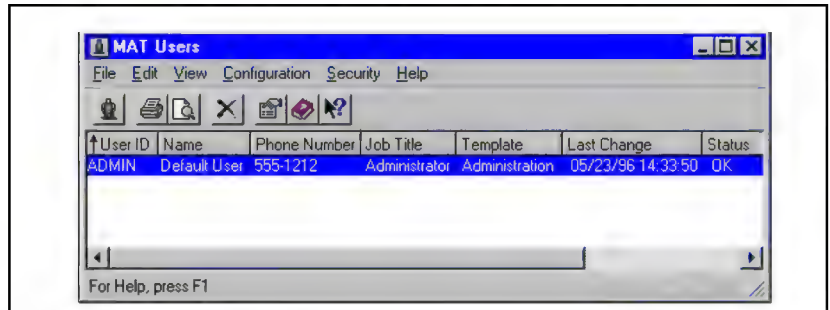
Configuring MAT users

MAT allows you to create User Templates to speed the process of adding users. A template is a form that you fill in to define most aspects of a certain kind of user, such as their level of access to sites and systems and automatic connection to particular systems. You can create as many user templates as you need. You will assign a template to individual users when you add users to the MAT database.

Creating a user template

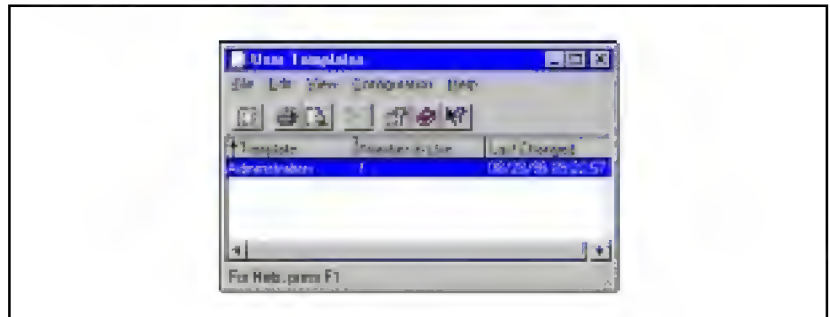
- 1 In the Navigator window, choose **MAT Users** from the **Security** menu to display the MAT Users window (Figure 17).

Figure 17
MAT Users window



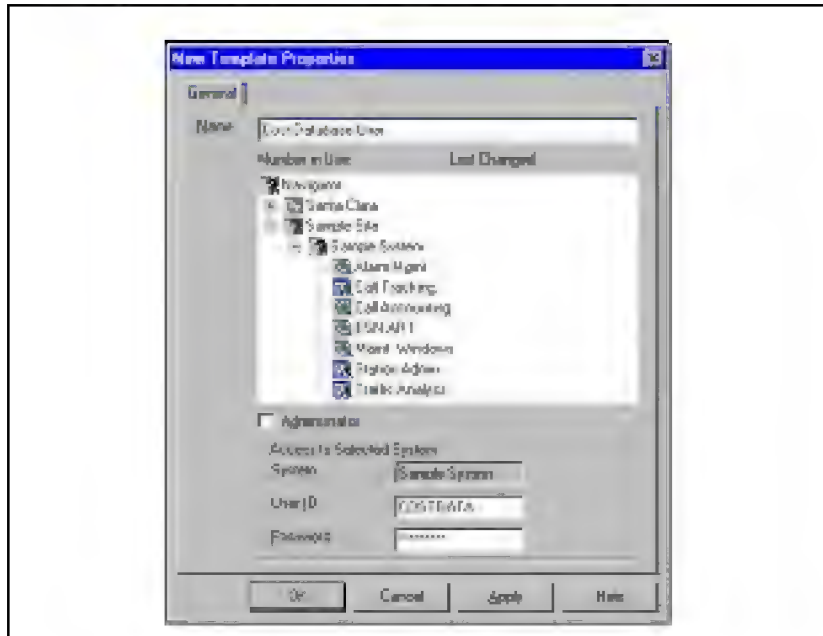
- 2 Choose **Templates** from the **Configuration** menu. The User Templates window appears (Figure 18).

Figure 18
User Templates window



- 3 Choose **Add Template** from the **Configuration** menu. The New Template property sheet appears (Figure 19).

Figure 19
New Template property sheet



- 4 Enter a name for this class of user.

For each site, system, and application in the tree, use the right mouse button popup menu to assign user privileges (Read-write, Read-only, or No Access). Select the Administrator box, if appropriate. The site and system icons change to reflect the access level.

Note: Access privileges defined for sites or systems at higher levels in the tree structure are applied to all subordinate items.
- 5 Enter values in the User ID and Password text boxes to allow this class of user to connect to this system without having to enter a User ID and Password each time you want to connect.
- 6 Click **OK**. Close the User Template window.

Adding a user

- 1 In the MAT Users window, choose **Add User** from the **Configuration** menu.

The New User property sheet appears (Figure 20).

Figure 20
New User property sheet

The screenshot shows a 'New User Property Sheet' dialog box with the following fields and values:

- User ID:** 1001
- Name:** LAURA JONES
- Phone Number:** 555-1212
- Job Title:** Accountant
- Comment:** (empty text box)
- Access Template:** First Domino User (dropdown menu)
- Status:** OK (dropdown menu)
- Current Status:** OK (dropdown menu)
- Last Change:** (empty text box)
- Last Login:** (empty text box)

A 'Change Password' button is located to the right of the 'User ID' field. At the bottom of the dialog are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

- 2 Enter a User ID, and from the Access Template drop-down list, select the template that you will use as the basis for this user definition.
- 3 Fill in other data as required. The window prompts you to enter a password and confirm it after clicking **OK** or **Apply**.
- 4 Click the **Change Password** button to change the MAT login password for this user only.
- 5 Click **OK**. The new user appears in the MAT User window. Close the MAT User window.

Deleting a user template

A user template can only be deleted when all associated users of that template are either deleted or re-assigned to another template.

Restricting user access permission levels

A user can be restricted from having access to sites, systems and applications. However, when a user is defined as being restricted from any access to all sites, systems and applications, i.e., the Navigator, the user will, in fact, be able to see all the sites and systems in the Navigator tree and have read-only access to their properties but opening a system will only result in a System Window with no applications visible.

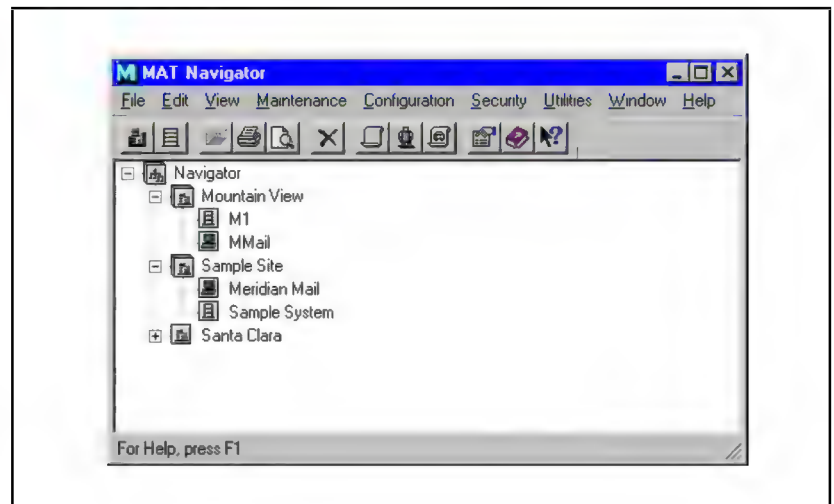
Sites and systems displayed in user templates

When adding or modifying a user template, only systems that have applications enabled are presented. If no applications are enabled for any system within a given site, the site and system(s) will not appear in the Template Properties.

MAT Navigator and System Window

The Navigator is MAT's main window—it allows access to nearly all MAT systems and services. Navigator shows the names and types of all systems available to the current user, and allows you to group the systems into sites for more convenient access.

Figure 21
Navigator window



Navigator provides the following functions:

- Displays a “tree” structure for Sites and Systems on the network managed by the current user. Access systems at a site by opening that site.
- Allows you to launch the System Window. See “Working with the System Window” on page 57.
- Allows you to configure and administer MAT data: Sites and Systems, Users, and so on
- Allows you to launch utility applications such as the Scheduler, Corporate Directory, and Alarm Notification.
 - Allows you to display the licensing and release information for all installed MAT applications
 - Allows you to print reports

Figure 22 illustrates these functions..

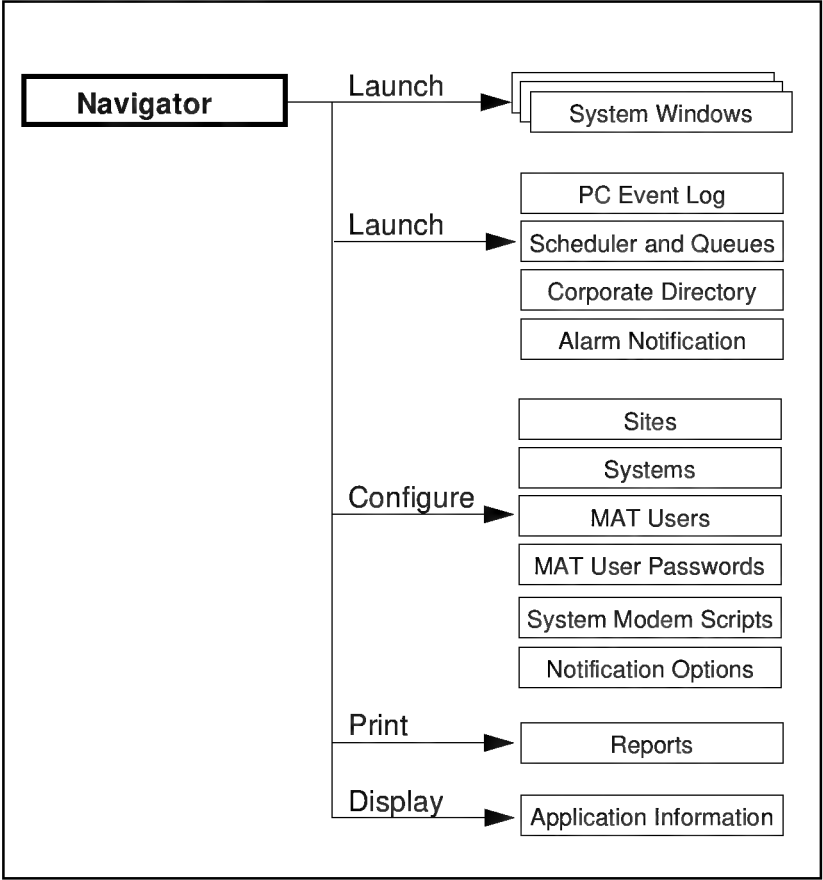
Using Navigator

Navigator allows you to access any Meridian 1 system or other systems which your user ID privileges allows you to. In Navigator, you open the site of interest to choose a system on which to work. Double-click a system to open its System window and launch any of the MAT 6 applications to work on that system.

Open a site by double-clicking its name or clicking the “+” symbol next to the site. The “+” changes to a “-” when the site opens. An open site displays all systems at that site. Close a site by clicking the “-” symbol.

For Meridian 1 systems, the components that make up the system appear in the system window. For systems defined as “Other,” MAT 6 displays a terminal emulation window.

Figure 22
Navigator functions



Logging in and launching the Navigator

Select **MAT** in the Windows **Programs** list. The login dialog appears (see Figure 23). Enter your User ID and password. The Navigator window appears as shown in Figure 24.

Figure 23
Login dialog box

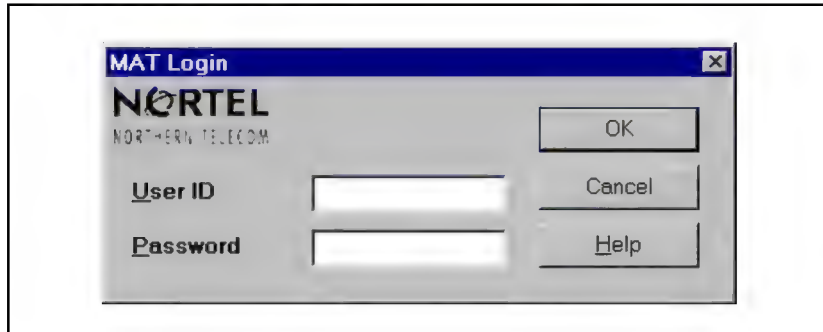
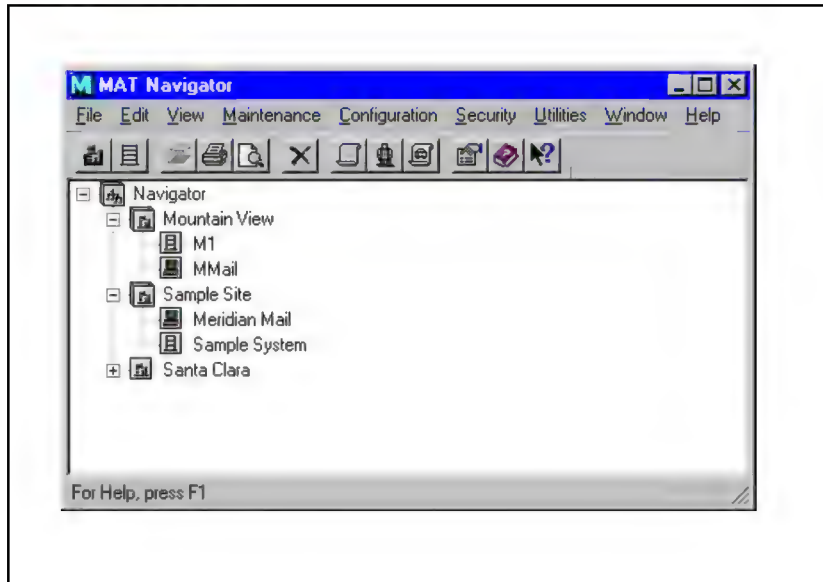


Figure 24
Navigator window



Navigator menus

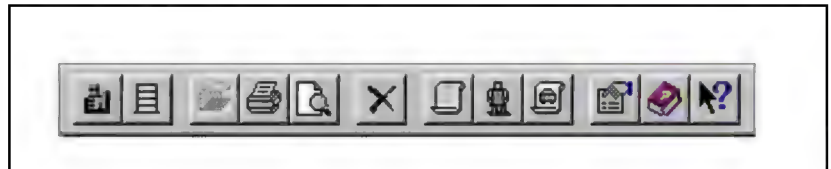
Detailed descriptions about the functions of each command in the Navigator menus are available by clicking the “Context-sensitive Help” button in the toolbar. Navigator menus consist of:

- File
- Edit
- View
- Maintenance
- Configuration
- Utilities
- Window
- Security
- Help

Toolbar

The Navigator toolbar includes several buttons that act as shortcuts to the commands available in the menus. The function of each button in the toolbar appears when you move the mouse over the button. See Figure 25.

Figure 25
Navigator Toolbar



Status Bar

A Status Bar is located at the bottom of the window. To display or hide the Status Bar, use the **Status Bar** command in the View menu.

The Status Bar describes actions of the menu commands as you use the mouse to navigate through menus. It also describes the actions of the Toolbar buttons as you press them. When you choose a menu command, the Status Bar describes the progress of the command while it executes. For example, the Status Bar shows **Printing text** when you choose **Print** from the File menu.

Using MAT Scheduler

Scheduler allows you to set up predefined tasks and schedule them to run at specific dates and times. Such tasks as system updates or data collection can be set up once for multiple execution.

A task is a specific activity that MAT 6 can perform, such as updating the system, generating a report, or collecting data. Note that only jobs can be scheduled; individual tasks cannot. A job may contain a single task or multiple tasks.

With job scheduling, you can request that one or more activities be performed once or on a recurring basis. When a scheduled job runs, it executes its component tasks in the sequence you specify. The Scheduler then sends these tasks to the Queue Manager at the specified time. If multiple tasks are in the same queue, the Queue Manager attempts to run them in queue sequence. You can access the Queue Manager to review and change the priority of task execution.

Accessing Scheduler

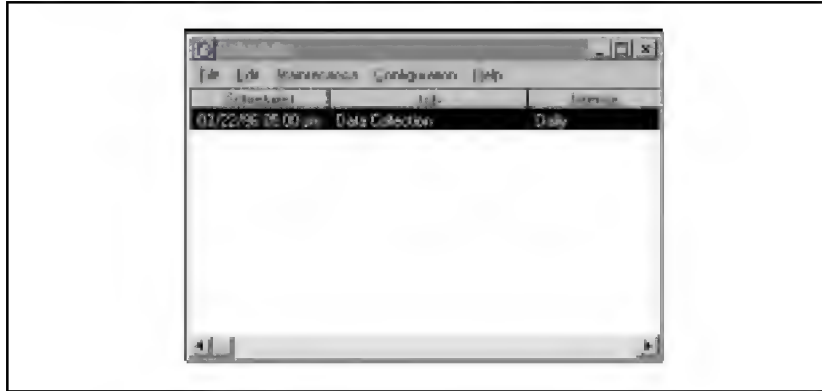
You can either directly access the Scheduler from a supported application, such as Station Administration, or you can access the Scheduler from the MAT Navigator and then create a job and its component tasks.

Access the Scheduler from a supported application by selecting the **Schedule** command where it appears. This is the more common method of running a scheduled job since most required tasks are run from a particular application (e.g., data collection in Call Accounting and Traffic Analysis).

Access the Scheduler directly from Navigator by clicking **Scheduler** from the Utilities drop-down menu. This may be necessary if no jobs have been previously scheduled in MAT and you wish to create or edit a scheduled job without running any supported applications.

Once you access the Scheduler, the following window will appear.

Figure 26
Scheduler window



How the Scheduler works

The Scheduler reads job data and builds a list of tasks and their schedule information in memory. Every minute, the Scheduler compares the current time with the scheduled time of each entry in the task list. When the times match, the tasks are executed sequentially, allowing one task to complete before the next task begins. If you close the Scheduler, the task list is lost—the task list is rebuilt the next time you run the Scheduler.

Jobs and tasks

The MAT Scheduler is used to execute activities (jobs) at scheduled dates and times. Each job consists of at least one task (or set of tasks) which can then be scheduled to run at a specific time. A task is a specific activity which the MAT system will execute as part of the job.

Only jobs can be scheduled; tasks cannot be scheduled separately. When the job runs, it executes its component tasks as they are listed in the Task List of the Job Properties dialog. In most cases, each job will only contain one task.

If a job contains multiple tasks, each task will be sent to the queue one after the other once the job starts. The Scheduler will send these tasks to the Queue Manager at the time of execution and run the Queue Manager accordingly.

If multiple tasks are waiting in a queue to run at the same time, the Queue Manager will attempt to execute each task sequentially as it appears in its queue.

Job Summary Display

As each job is configured and added to the Scheduler, it will be displayed in its main window. The main Scheduler window contains this list of jobs in this Job Summary Display grid.

You can use the cursor commands to resize and move each column in this grid as required. This Job Summary Display lists all of the configured jobs and their basic information. From this display grid, you can scan through each job and select it for editing.

The Job Summary Display grid lists the following information for each configured job:

- Scheduled
- Job
- Interval

Configuring and scheduling a job

Once you access the MAT Scheduler, you can begin to schedule its jobs and add tasks to it. Use the Scheduler editor commands to create and update jobs throughout your session.

The first step in setting up a job is to select a job and assign a single task or group of tasks to this job. You can select an existing job to edit or create a new job.

Once you have assigned the tasks to the job, you must specify the date and time at which the job will be run as well as any intervals for subsequent executions of the job.

If you are creating a new job from another MAT application, that is if you are scheduling an activity from that application, then the system will directly access the Job Properties dialog. From this dialog, you can enter the job's general information, its individual tasks and its scheduled date and time.

To create a new job directly from the Scheduler, click **Add Job** from the Configuration drop-down menu. Again, this will access the Job Properties dialog from which you can enter this job's information.

To edit an existing job, click once on the job record line in the Job Summary Display to highlight it and click **Properties** from the File drop-down menu (or simply double-click on the job record line). Again, this will access the Job Properties dialog from which you can edit this job's information.

Once you have accessed the Job Properties dialog, enter the job's information by selecting the following tabs:

- General
- Task
- Schedule

Once you have entered the job's details, tasks and scheduling information, click **OK** to save it and exit to the Scheduler main window.

If you accessed this function from the Scheduler main window, then closing the Job Configuration dialog will return you to the main window.

If you scheduled a job from a task command dialog (from another application), then this will return you to that application. The job will then be executed at its scheduled time.

Example job configuration

The following example highlights the main steps involved in configuring and scheduling a job which is invoked from another MAT application.

Scenario

A user wishes to schedule a data collection from MAT Call Accounting daily at 5:00 p.m. The initial data collection will be run on the current day which is 03/22/96.

Steps to scheduling a job

- 1 Open a system and access Call Accounting. From Call Accounting, click **Communications** and click **Schedule Data Collection** from its drop-down menu. Since you are creating a new task, you must either create a new job to which this task belongs or add the task to an existing job. Remember that an activity such as data collection is a task which is associated with a job. You cannot schedule a task; only a job.
- 2 When you click **Schedule Data Collection** from Call Accounting, the Add Task for Scheduling dialog will appear prompting you to either add this task to an existing job or create a job and add the task to the new job.

Note: For this example, you will create a new job. Therefore, click **Add New Job** from this dialog. This will access the Scheduler Job Properties dialog.
- 3 In the Job Properties General tab fields, enter the following:
Name: **Data Collection** (used for informational purposes)
Queue: **Data Collection** (used by the Queue Manager to create a queue by this name)
- 4 Click the **Task** tab to review the tasks which are added to this job. Notice that the Data Collection command is the only task in this list.

- 5 Click the **Schedule** tab to enter the scheduling criteria for this job. In the Schedule fields, enter the following:

Interval: **Daily**

Start at: Month: **03** Day: **22** Year: **96**

Hour: **5** Minute: **00** am/pm: **pm**

- 6 Click **OK** to save this configuration. Notice that the Job Summary Display grid will appear with this job added to it.

This completes the example job configuration. This job will then be run at the scheduled time. Ensure that the Scheduler is running at the scheduled time so it can run the job.

Device contention

The Queue Manager contains certain restrictions when managing multiple queues for a single device. This applies when multiple jobs are sent by the Scheduler to the Queue Manager for execution and therefore have multiple queues stored in the Queue Manager database. A job is a group of tasks which is sent to the Queue Manager as a queue. If these queues attempt to access the same device (e.g., COM port) at the same time, then only one queue will be able to use it successfully. All other queues will NOT be able to access that device and will therefore not run.

The following example helps demonstrate this contention.

Example for device contention

The following jobs have all been scheduled to run daily at 12:00pm. They will all invoke separate queues which will attempt to use COM 2 on the MAT PC.

- Call Accounting data collection
- Call Tracking real time access
- Traffic Analysis data collection

At 12:00pm, each of these jobs will be sent to its own queue in the Queue Manager which will then attempt to access COM 2. Since they will all attempt to access COM 2 at the same time, COM 2 appears to be available to each of them. Each queue will then run a task. However, COM 2 will **ONLY** be available to the first task which executes. Since the remaining tasks cannot access COM 2, they will not execute.

Late execution

This device contention issue also applies to queues which have Late Execution enabled. If the MAT system is shut down and starts up again, any jobs which have Late Execution enabled (and their scheduled times have elapsed) will attempt to run immediately. If these jobs attempt to access a single device at this time, then only the first task will be able to access it. All others will fail.

To prevent this contention problem from occurring for jobs with late execution, you should use caution when enabling this option. Ensure that only the required jobs have this option enabled or verify that they will not access the same device during a system shut down and start up.

Solution

To prevent this from occurring during normal system operation, use the following guidelines.

- If you need to schedule multiple jobs for a single device all at the same time, or if you cannot schedule the jobs so that you are sure that the device will be released in time, then schedule the jobs as multiple tasks sent to a single queue. The Queue Manager can then manage these tasks in the single queue and send them to the device as each task is completed. Each task in the queue will wait for the previous task to release the device before attempting to access it. This way, you will ensure that all of the tasks will be able to access the device and execute successfully.
- This is a recommended solution since it allows the Queue Manager to manage the tasks for a single device allowing each task to use the device as it becomes available.
 - If you need to schedule jobs at different times and they all require a single device, ensure that these jobs are scheduled to run at times far enough apart to allow the device to be released by a queue before the next job is scheduled to run. Also ensure that the Late Execution option is disabled for each job in case of a system shut down and start up.

Scheduler menus

Detailed descriptions about the functions of each command in the Scheduler menus are available by clicking the “Help” button in the Scheduler menu bar. Scheduler menus consist of:

- File
- Edit
- Maintenance
- Configuration
- Help

Queue Manager

The MAT Queue Manager is used to store and execute the scheduled jobs as defined in the MAT Scheduler. Queue Manager ensures that a sequence of tasks are performed in a specific order, allowing each task to run to completion in a designated order before executing the next (e.g., ensuring that a traffic data collection is run before a traffic data parse).

When a job is scheduled, the Scheduler sends all tasks associated with that job to the Queue Manager for assignment to a specific queue for handling.

The Queue Manager is also useful in situations where a non-shareable facility is required, such as a communications port. A communications port may serve a number of communications scripts which cannot all run simultaneously. The Queue Manager allows the system to manage multiple requests through a single queue model.

The Queue Manager contains a number of individual queues. Each queue is responsible for a job, although multiple jobs may share a single queue.

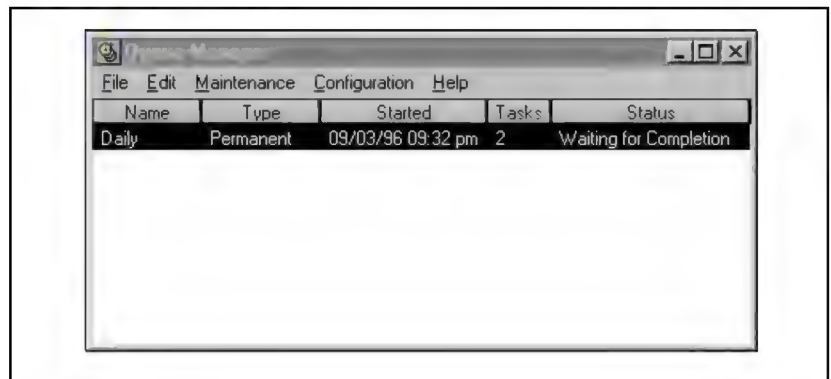
The Queue Manager is responsible for placing jobs and tasks into the correct queue for handling. Although there is only one Queue Manager, there may be a number of active queues. Each queue executes its own tasks sequentially, but all queues operate independently.

Accessing Queue Manager

To access the Queue Manager directly from the MAT Navigator, click **Queue** from the Utilities drop-down menu of the MAT Navigator window. The Queue Manager window will appear with all of the configured queues listed in its main window—the Queue Summary Display. Once you have accessed the Queue Manager, you can use it to create and edit its configured queues.

The Queue Manager window is shown in Figure 27.

Figure 27
Queue Manager window



The Queue Manager window lists all of the configured queues and their basic information. From this display, you can scan through each queue and select it for editing.

Configuring a queue

Once you have created and added a queue to the Queue Manager using the Scheduler, you can access it again to edit its properties or add tasks to it as required.

To edit a queue, either double-click on the queue record in the Queue Summary Display grid or click once on the queue record and click **Properties** from the File drop-down menu. Edit this queue by selecting from the following tabs in this dialog:

- General
- Tasks

Once you have entered the information for each queue, click **OK** to save it and exit to the Queue Manager main window.

Using Corporate Directory

MAT's Corporate Directory is a flexible tool for defining and generating reports of station data associated with terminal number. Report data is provided by MAT Station Administration. Data can include about 100 different data fields, including the name, extension, location, and department associated with each terminal number.

Note: Corporate Directory requires that you have MAT Station Administration and Microsoft Excel 95 or later currently installed.

Defining and generating reports

Select **Corporate Directory** from the **Utilities** menu of the Navigator window. This opens the Corporate Directory window, where you can view and manage reports. You can use predefined reports or define new reports.

To define a report, select **Add Report** from the **Configuration** menu. This displays the New Report property sheet where you can define data fields, column names, column order, and directory location for the report.

To generate a report, select **Generate Report** from the **File** menu. Select **Now** to immediately display the report in a Microsoft Excel window, print the report, or save it to a file. Select **Schedule** to have the report automatically generated to a printer or Excel file at a later time. Select a report by name, then select **Open** to display the most recently generated version of that report.

Note: Before you can generate reports, Station Administration data must be downloaded from the switch and you must have at least one customer configured for each system.

See "Generating Reports" in the *Station Administration User Guide* for more information.

Using Backup and Restore

MAT's Backup and Restore utilities provide convenient options for safeguarding, cloning, and restoring MAT data on a PC. The Backup utility lets you create a MAT 6 backup file of PC-based system property and application data for any or all sites and systems. The Restore utility lets you restore a backup file to the same or different sites and systems on the same or other PCs.

Note: The Backup and Restore utilities have no affect on Meridian 1 data. To secure MAT data that has been uploaded to the switch, you must use MAT's Electronic Data Dump feature described on page 61.

Media, files, and data types

You can create a MAT backup file on the PC's hard drive, a network drive, diskettes and other removable disks, or any other available media that meets your requirements for convenience and file space.

All backup data is written to a single folder for each backup operation. This folder includes the following files:

- Zip file (*.ZIP), the backup file in compressed format
- Log file (*.LOG), providing the backup file's date; type; MAT version; and sites, systems, and applications by name

You can back up and restore data for all or any combination of the following MAT applications:

- Call Accounting
- Call Tracking
- ESN
- Station Administration
- Traffic Analysis

You can back up and restore data for these MAT applications across multiple sites and systems at the same time.

Applications are associated with specific sites and systems. All backups of application data include the system property data associated with the selected site or system.

When you restore data from a backup file, you have the option *not* to restore system property data. This option is useful in cases where the destination site or system is pre-configured and you do not want to overwrite its system property data. For example, system property data such as communication ports, modem configuration, and user ID and password, may be different from one PC to the next.

Benefits

The Backup and Restore utilities provide several key benefits:

- cloning
- moving data offsite
- disaster recovery

Cloning

The process of copying system property and application data associated with one site or system to another site or system is called *cloning*. Copying data to another site or system can be a great timesaver. It can save you from having to enter a large amount of similar data one item at a time.

After cloning selected data, you can simply focus on making whatever changes are necessary to the cloned data. This operation is very flexible. The destination site or system can be new or already exist, and it can be on the same PC or on another PC.

Note: If you back up data from one PC and restore it to another, you must perform this operation under the same version of MAT. You cannot back up data from a PC with an older version of MAT and then restore the data to a PC with MAT 6. Upgrade the older version of MAT before performing this type of *cloning* operation.

Moving data offsite

If you want to maintain or occasionally modify MAT data offsite, a MAT backup file provides the solution. You can restore the backup file on any PC that has the same version of MAT installed.

When you finish modifying MAT data, create a new backup file. Then you can restore the modified data to the original or primary PC where MAT is installed.

Note: This operation works particularly well for modifying application data. Remember *not* to restore system property data from one PC to another if the PCs need to have different configurations for the corresponding sites and systems.

Disaster recovery

An important part of safeguarding your MAT data is having a disaster recovery plan. This plan should consider who makes the backups, what is backed up, how often, on what media, and where the backups are stored.

The Backup utility includes a more comprehensive backup option that is designed for disaster recovery. This option automatically backs up all sites, systems, and applications, and additionally saves user-created files such as scripts and customized reports. Consider performing this type of backup at least once a month and storing the backup file in a safe place.

In the event of unrecoverable data loss, restore your disaster-recovery backup file first. All file contents are restored to the PC. Then, if you have backups for selected sites, systems, and applications that are more recent, restore them next.

Note: MAT executables and files that can be reinstalled from the MAT CD are *excluded* in a disaster recovery backup. If MAT executables have been damaged or lost due to a hard-disk crash, for example, you will need to reinstall MAT on your repaired or replaced PC before restoring your disaster recovery backup.

Running the Backup utility

Select **Backup** from the **Utilities** menu of the Navigator window. This invokes a wizard to help you define the following parameters:

- Type of backup (single site, single system, all sites and systems, or disaster recovery)
- Applications (Call Accounting, Call Tracking, ESN, Station, and/or Traffic)
- Destination directory for backup files
- Temporary directory for working files created during the operation

Note: The destination and temporary directory screens display a computed space requirement for the files. You can back up and restore data for these MAT applications across multiple sites and systems at the same time.

The next screen to appear is a dialog box (Figure 28) that summarizes your choices. Click **OK** to start the backup operation, or **Cancel** to return to the wizard and change your options.

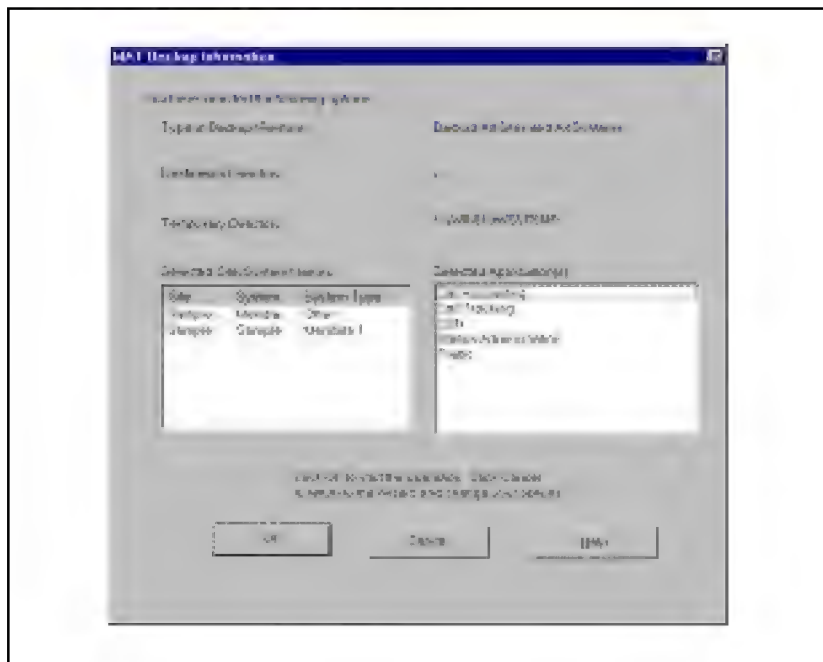
Running the Restore utility

Select **Restore** from the **Utilities** menu of the Navigator window. This invokes a wizard to help you define the following parameters:

- Type of restore (single site, single system, all sites and systems, or disaster recovery)
- Specific backup file and destination directory
- Temporary directory for working files created during the operation

The next screen to appear is a dialog box that summarizes your choices. Click **OK** to start the restore operation, or **Cancel** to return to the wizard and change your options.

Figure 28
MAT Backup Information dialog box



Using Alarm Notification

MAT's Alarm Notification application is an advanced alert system to help you monitor specified events. This application lets users familiar with programming logic and scripting principles define alarm-triggering Simple Network Management Protocol (SNMP) events.

MAT can filter events that originate from the Meridian 1 and a variety of defined network devices. MAT complements and supplements existing external alarm management systems with added flexibility, features, and capacity.

When Alarm Notification is running, all received SNMP events are displayed in the Alarm Notification window and compared with programmed rules. You define the rules in a scripts file according to your phone-system requirements.

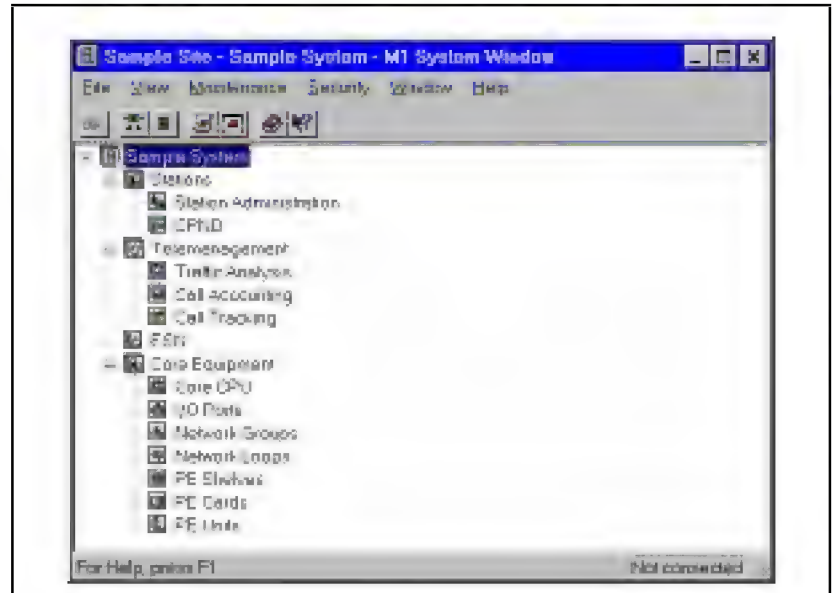
When specified events trigger alarms, these notifications are displayed in a small Console window within the Alarm Notification window. These notifications are retained in memory as well. Also, you can set up the application for remote alerts, for example, by email or pager.

You can launch this application by selecting **Alarm Notification** from the **Utilities** menu of the Navigator window. See the *Alarm and Event Management with Alarm Notification User Guide* for more information.

Working with the System Window

From the Navigator, double-click the system on which you wish to work and the System window for that system appears. See Figure 29.

Figure 29
System window



System window allows you to launch the following applications (some of these applications are purchased separately):

- Alarm Banner
- Events
- System Terminal (Ethernet or PPP)
- System Terminal VT220 (serial)
- Station Administration
- Traffic Analysis
- Call Accounting
- Call Tracking
- ESN Analysis and Reporting Tool
- Maintenance Windows
 - Core CPU window
 - I/O Ports window
 - Network Groups window (not applicable for Option 11C)
 - Network Loops window (includes B and D-channels window)
 - PE Shelves window (not applicable for Option 11C)
 - PE Cards window
 - PE Units window

System Window menus

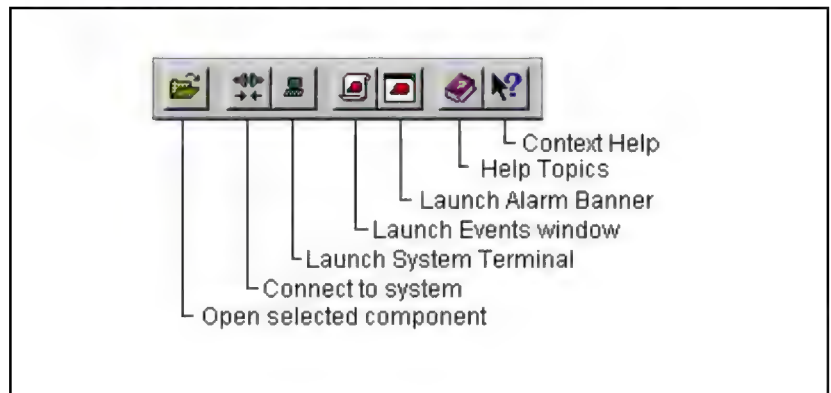
Detailed descriptions about the functions of each command in the System window menus are available by clicking the “Context-sensitive Help” button in the toolbar. System window menus consist of:

- File
- View
- Maintenance
- Security
- Window
- Help

Toolbar

The System Window toolbar includes several useful buttons. The function of each button in the toolbar appears when you move the mouse over the button. See Figure 30.

Figure 30
System window Toolbar



Using Electronic Data Dump

MAT's Electronic Data Dump (EDD) is a critical database-update operation on the Meridian 1 switch. This operation dumps (saves) modified data from the switch's resident memory to database files on the switch's hard disk. These database files contain the active configuration information for phone-system terminals and users.

Synchronizing and securing data

Using MAT's Station Administration and ESN applications, you can modify station data, Call Party Name Display (CPND) data, and Electronic Switched Network (ESN) data. MAT stores these changes in its PC database files. The phone system cannot recognize these changes, however, until you upload the modified data to the Meridian switch. This operation synchronizes switch data with current MAT data on the PC.

Updating the switch's data is a two-step process. The first step is to transmit modified MAT data from the PC to the switch's resident memory. MAT's Station Administration and ESN applications include a **Synchronize** menu for this purpose. The second step is to use MAT's EDD feature to dump modified data from the switch's resident memory to the switch's hard disk.

To secure modified data at the switch, you must dump it to the switch's hard disk. Optionally, your distributor technician can set up the switch so that you also dump data to a diskette that you insert in the switch's floppy drive. Power interruptions erase all data in resident memory. When power is restored, switch data is automatically restored from its database files on the hard disk. Modified data that was *not* previously dumped to these database files is lost at the switch. Further, this data may be difficult to isolate in the PC's MAT applications, since *all* previously uploaded data shares the same TRN (transmitted) status. For these reasons, *always* perform or schedule data dumps after uploading data to the switch.

Accessing EDD

You can access EDD from the **File** menu of the System window. The EDD selection is called **Data Dump**. This selection has its own submenu with the options **Now**, **Schedule**, and **View Log**.

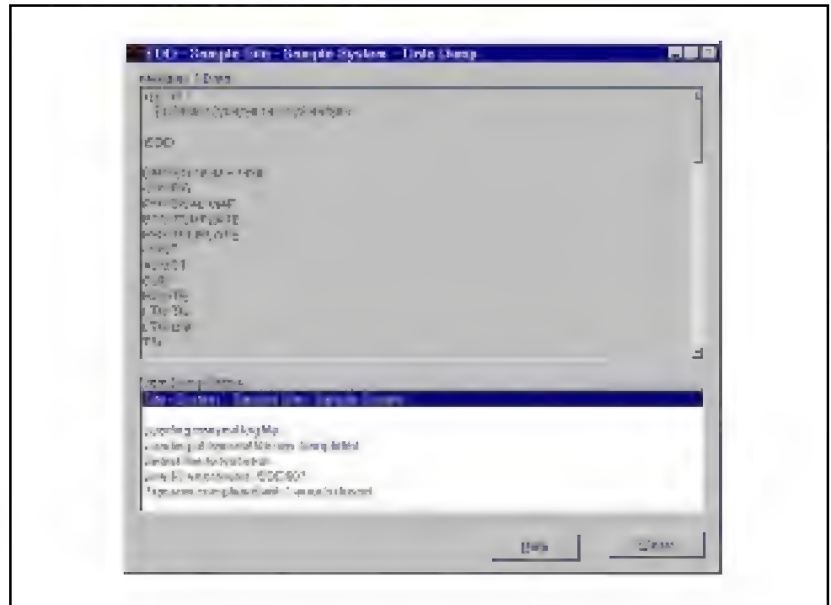
You can select **Now** to perform the data dump immediately, **Schedule** to set up the operation to run automatically, or **View Log** to review status and error information from the most recent data dump.

The data-dump operation takes just a few minutes. While modified MAT data is being dumped at the switch, status and error information about the data dump is actively logged to the PC. Both **Now** and **View Log** open the EDD Data Dump dialog box for viewing or reviewing, respectively, this status and error information. This log is saved to the PC's hard disk and each data dump overwrites the existing log file.

Note: To access error information, open the Events window after the data dump and double-click each error event of interest. This invokes help that is specific to each error.

The **Schedule** option opens the Scheduling dialog box. Here you can select when and how often you want to dump data at the switch. It is best to schedule this operation for a time soon after uploading MAT data to the switch. The MAT Scheduler sends the job to the Queue Manager at the designated time.

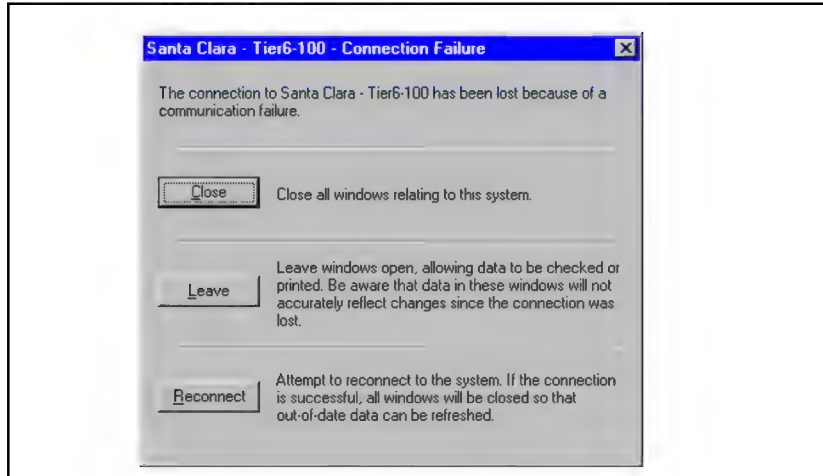
Figure 31
EDD Data Dump dialog box



Responding to a connection failure

If you are connected to M1 system and that connection fails, a warning message appears. See Figure 32. You are given the following options:

Figure 32
Connection Failure dialog



- Close all system windows and reconnect to the system
- Leave the system windows open so that you can copy or print any or all of the following information:
 - Command results in the System Terminal window or any open Maintenance window.
 - Alarms or events in the System Event Log.
 - Maintenance window objects, such as network loops within the Network Loops window.

Note: When you have finished printing the desired information, close the system window and reconnect to the system.

- Attempt to reconnect to the system.

Using System Terminal

System Terminal helps you perform overlay-based tasks directly through the Meridian 1 TTY interface. System Terminal provides online, context sensitive help for overlays, prompts, and error messages. System Terminal also provides a terminal emulation capability.

There are two versions of System Terminal to support two different connection types—Ethernet or PPP and Serial—as follows:

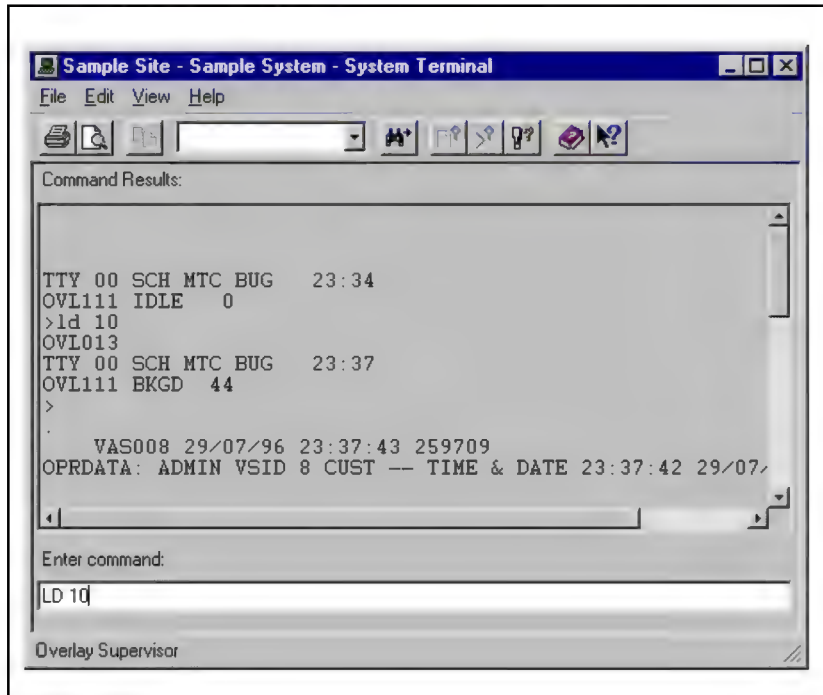
- Overlay Passthru is available on X11 release 22 and later systems connected to MAT using Ethernet or PPP. Overlay Passthru only supports access to the overlays.
- VT220 provides similar functions for any Meridian 1 system using serial connections, as well as terminal emulation for all application modules (such as Meridian Mail). VT220 is discussed in “VT220” on page 75.

In release 22 and later switches, you access the overlays using the System Terminal (Ethernet or PPP required) and access the application modules via VT220. In pre-release 22 switches, you access both the overlays and application modules via VT220.

Launching System Terminal (Ethernet or PPP required)

Once you connect to the system of interest, launch System Terminal by selecting **System Terminal** from the **Maintenance** menu or toolbar in the System window. Enter your system user ID and password in the System Login dialog. Figure 33 shows the System Terminal window.

Figure 33
System Terminal window



The System Terminal window displays all system events as they occur. It also gives you direct access to any overlay.

Note 1: For Ethernet or PPP connections, each active System Terminal connection requires a pseudo-TTY (PTY) port. PTYs are software-only I/O ports. The System Terminal and Maintenance Windows applications use these ports to access the overlays.

Note 2: Ethernet and PPP are available only for X11 Software Release 22 and above with packages 296 and 243 equipped.

System Terminal window

The System Terminal window includes the following:

- An **Enter Command** edit box in which you type overlay commands
- A **Command Results** list box that displays your interaction with the overlays and the results
- Links to online help are available for the following:
 - Help on the current overlay
 - Help on the current prompt
 - Help on the last or selected error message
 - One-line description of prompts in the status bar

You use overlays just as you did before MAT 6 was available. The one minor difference is that you type into an edit box rather than the last line of the screen as with TTY and Terminal Emulation applications. You still use the **<Enter>** key to send the typed-in data (an overlay command or response to a prompt).

Using System Terminal

You can do the following from System Terminal:

- Load an overlay as you normally would on a TTY or Terminal Emulation application
- Cut or copy system events or overlay command results to the clipboard
- Save or capture the command results to a file
- Get help on a Meridian 1 error message
- Get help on an overlay
- Get help on a prompt
- Monitor system events

Advantages over a TTY

You now have the following advantages over the old TTY:

- You can type in lower case and use the backspace key
- **Copy** and **Paste** in the **Enter** Command box (useful for repeated commands with only a TN change)
- Scroll back in the command results
- **Copy** and **Print** the command results
- Capture output to a file as well as to the screen
- **Save** the command results to a file

Getting help on the current overlay

You can get more help on the currently loaded overlay using the **Current Overlay** command in the **Help** menu. The help file is organized in a similar fashion to the *I/O Guide*.

Note: The **Current Overlay** button or menu item is disabled when you are not in an overlay.

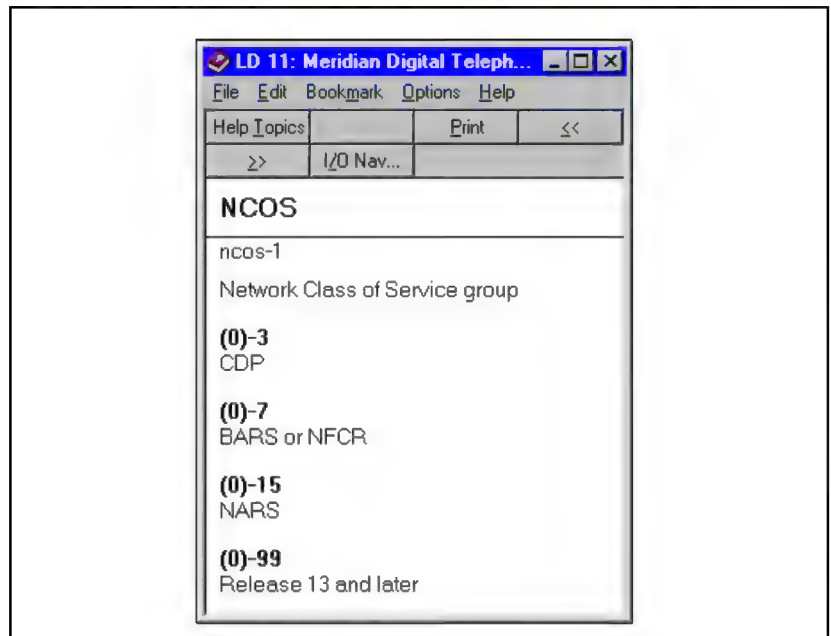
Example

If you are in overlay 10, you can select **Current Overlay** from the **Help** menu, and then navigate within help to the **CPND** prompt sequence. You can click on any prompt in the sequence. This displays the help window for that prompt—the same as help on **Current Prompt**.

Getting help on the current prompt

Figure 34 shows an example of the help you can get on an administration overlay. You load the overlay and respond to the prompts, one at a time. This help guides you as you load the overlay and respond to the prompts.

Figure 34
Current prompt help example



If an overlay is currently loaded, the Status Bar at the bottom of the window provides a short description of the current prompt.

If the one-line description is not enough, you can read a full description of the prompt in Windows Help. Choose **Current Prompt** from the Help menu.

Note: Help on the current prompt is disabled if you are not in an administration overlay.

To get help on any other prompt choose **I/O Navigator** from the Help menu.

Getting help on an error message

System Terminal can distinguish error messages from the other text in the **Command Results** list box. The **Error Message** command in the **Help** menu provides the error description in Windows Help.

You can get help on an error message in the following ways:

- Double-click an error message anywhere in the Command Results.
- Select the **Error message** command in the **Help** menu to get help on the last error message (even if it is scrolled off the screen).
- Select an error message anywhere in the Command Results, then select the **Error message** command in the **Help** menu.
- Select the **I/O Navigator** from the **Help** menu.

The error message help window appears when you select the **Error message** command in the **Help** menu.

Note: You can also get help on Meridian Mail System Error and Event Reporting (SEER) messages using the I/O Navigator.

System Terminal menus

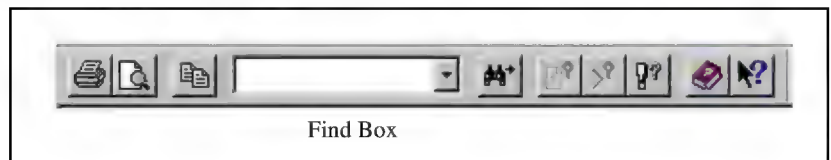
Detailed descriptions about the functions of each command in the System Terminal menus are available by clicking the “Context-sensitive Help” button in the toolbar. System Terminal menus consist of:

- File
- Edit
- View
- Help

Toolbar

The System Terminal toolbar offers several useful shortcuts to the menu commands. See Figure 35.

Figure 35
System Terminal toolbar



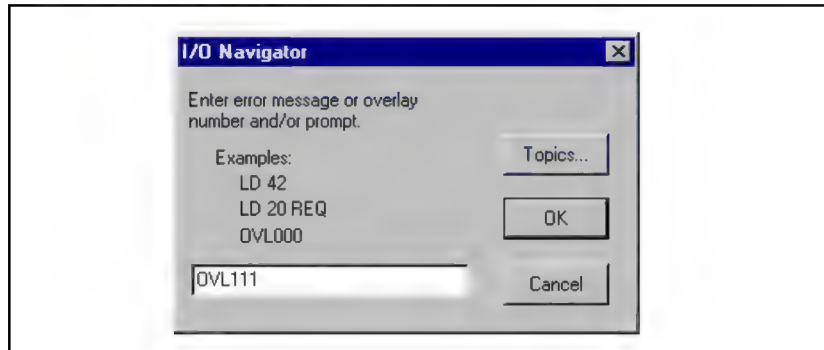
Note: The **Find** and **Find Next** icons in the toolbar allow you to search the Command Results for the text string that you enter in the **Find box**. **Find** is case-sensitive. The search begins at the current location.

Using the I/O Navigator

The I/O Navigator displays a dialog box that allows you to quickly jump to help on any overlay, prompt, command, or error message. Select **I/O Navigator** from the overlay’s **Help** menu or from the **I/O Navigator** buttons in the appropriate Help files.

The I/O Navigator allows you to navigate through I/O reference help independent of your current context within the overlays. For example, you do not need to be logged into a system to look up an error message using the I/O Navigator. See Figure 36.

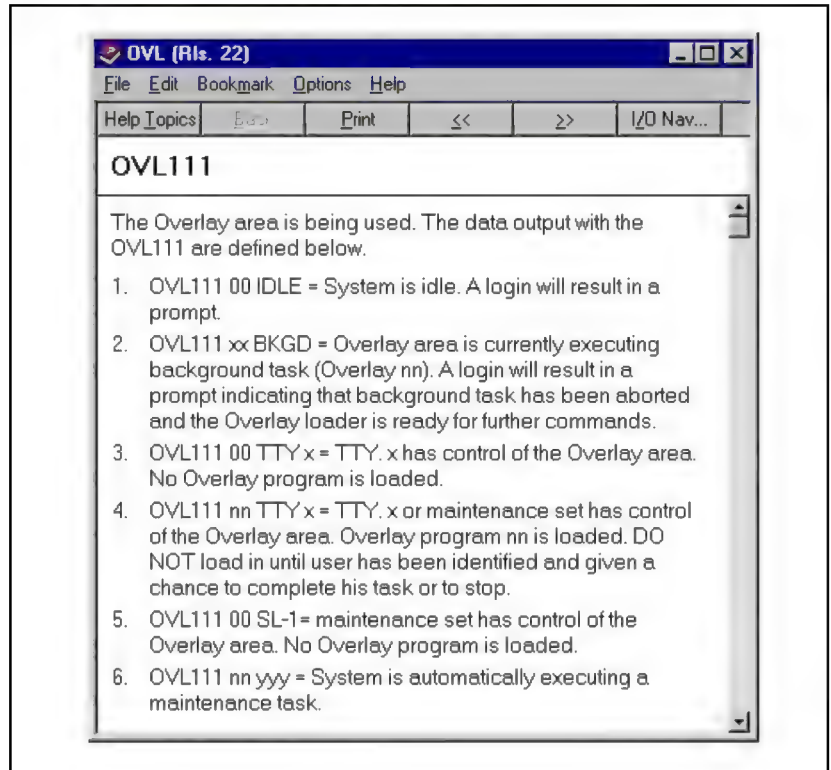
Figure 36
I/O Navigator dialog



Type the overlay number, error message number, or prompt in the text entry field and click **OK**. Help information for the specified overlay, prompt, or error message appears.

The **Topics** button displays the general reference Help index. See Figure 37.

Figure 37
Example Help Index for an error message



The **Cancel** button cancels a search.

Entering an overlay (LD XX) or error code mnemonic (ERR, BUG) takes you to the contents page of the appropriate help file. Entering the error code (BUG3001) or an LD number and a prompt takes you to the Help topic page.

- If the prompt or error message you specify does not exist, the help search dialog appears with the nearest match selected.
- If the overlay number or error message type do not exist, a “Help file not found” information dialog appears.
- The **I/O Navigator** command can be used from within Help. You do not need to be connected to a switch.
- There are some combination overlays (for example, one help file describes two overlays). You can enter either of the overlay numbers. These cases are:
 - LD 36 and LD 41
 - LD 40 and LD 42
 - LD 20, LD 21, and LD 22
 - LD 84 and LD 85
- Leading zeros are not required in error messages. For example, entering SCH22 or SCH022 will find the description for SCH0022.
- To look up Meridian Mail System Error and Event Reporting (SEER) messages, enter XXXYY (where XXX is the message class, and YY is the message number—no mnemonic is required). For example, enter 11102.

VT220

The VT220 application models the VT100/220/320 series of terminals to set up communications between your PC and the Meridian 1. With VT220, you can connect to the Meridian 1 using a serial, PPP (point to point protocol), or Ethernet connection. It supports the transfer of ASCII data during a communications session and provides normal TTY and VT220 access to overlays that are not supported by the MAT applications

Features

VT220 supports the following features:

- Double-height, double-width, blinking, bold and underlined characters
- Complete graphic character set, including a special font for representing control characters
- Scrolling regions
- 80 and 132 column modes
- Echo, no echo, local mode and autowrap on/off
- Reverse video characters and reverse video screen
- Cursor types—block, underline, vertical line, or none
- Selectable cursor blink rate
- User-definable Tab stops
- Programmable function keys
- Display control mode
- National character sets

Accessing VT220

Before accessing VT220, you must first select the type of terminal emulation session you require. To do so, perform the following steps:

- 1 Click once on the system name in the MAT Navigator to highlight it and click **Properties** from the File drop-down menu (or simply right-click on the system name and click **Properties**).
- 2 From the System Properties window, click the **Communications** tab and select the desired settings file from the Terminal Emulation VT220 Settings drop-down list box (e.g., MMAIL.INI).
- 3 Click the **Applications** tab and click once on **System Terminal (VT220)** in the Applications list box to highlight it.
- 4 Select a communications profile for System Terminal (VT220) by clicking on the desired profile name in the Communications Profile drop-down list box.
- 5 Click OK to select these settings and return to the MAT Navigator.

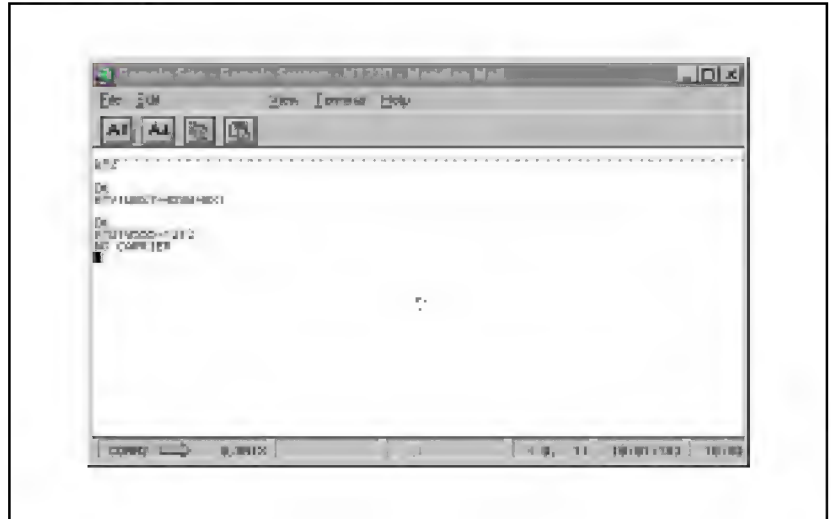
To access VT220, perform the following steps:

- 1 From the MAT Navigator, select the desired site and system and click **System Terminal** from the Maintenance drop-down menu.
- 2 From the System Terminal Selection dialog which appears, click **Serial (VT220)** and click **OK**.

VT220 will attempt to connect to the terminal based on the communications criteria entered in the System Properties Serial Communications Profile for this system. Once it establishes this connection, the VT220 main window will appear listing the commands and graphical tools required for the emulation session. See Figure 38.

The following sections will briefly list the main functions of VT220.

Figure 38
VT220 window



File menu

The File menu contains functions used to save the VT220 configuration, print the contents of the terminal window, record and replay VT220 terminal emulation sessions and close the system.

The following is a summary of these functions:

- Save Configuration
- Save Configuration As
- Print
- Print Setup
- Printer Fonts
- Capture
- Playback
- Close

The **Save Configuration** and **Save Configuration As** menu items are only available if you have selected a user defined terminal type (as defined as the 'Other' VT220 type from the MAT System Properties Communications tab). Otherwise, they will appear grayed.

Edit menu

The Edit menu contains editing commands used to manipulate the text appearing in the main window.

The following is a summary of these functions:

- Copy
- Paste
- Select All

Configuration menu

Once you start VT220 from the system window of the MAT Navigator with a user defined type of terminal (as defined as the **Other** VT220 type from the MAT System Properties Communications tab), then you can use the Configuration functions to customize the VT220 settings to suit your needs. The purpose of having the 'Other' type is to allow you to create multiple types of settings based on generic settings.

If you do not select 'Other' or a user defined type, then you will not require these functions to run VT220. The Configuration command will therefore appear grayed.

Before you can customize the VT220 settings, you must first select the custom VT220 settings file OTHER.INI using the Communications tab from the MAT Navigator System Properties application. Refer to "Accessing VT220" on page 76 for more details on selecting this option. This file appears in the VT220 settings drop-down list box. When you launch VT220 from this customizable terminal, you can then use the commands which appear in the Configuration drop-down menu to change the settings for VT220.

Once you have edited the VT220 settings using these functions, you must then save the customized configuration file using the **Save Configuration As** command. Using this command, you can enter the name of this configuration file for use in later sessions.

VT220 includes a number of setting files which are predefined depending on the system to which you are connected. For example, M1.INI is a predefined setting file used for a VT220 terminal emulation session with the Meridian 1, and MMAIL.INI is a predefined setting file for Meridian Mail. These setting files provide the required VT220 settings and cannot be edited.

The following is a summary of the Configuration functions:

- Terminal Setup
- National Replacement Character Set
- Map Keyboard
- Program Keys
- Tab Setup
- Options
- Status Bar

View menu

The View menu contains toggles to adjust the display of the VT220 window as well as hide and display the Tool Bar, Status Bar and Keys Window.

The following is a summary of these toggles:

- Terminal
- Hide/Show Tool Bar
- Hide/Show Status Bar
- Hide/Show Keys Window

Terminal menu

The **Terminal** menu contains commands used to connect and disconnect VT220 for a temporary communications setup. The **Connect** and **Disconnect** commands start and stop the terminal emulation. The **Temporary Communication Setup** function temporarily creates a terminal emulation session based on customizable connection criteria. This setup is only temporary for the current session. When you access VT220 again, it will use the criteria defined for this system in the MAT **System Configuration** function.

The following is a summary of these commands:

- Connect
- Disconnect
- Temporary Communication Setup

Help menu

In addition to the standard online help features for VT220, this **Help** menu contains topics which provide help with the Overlay Enhancer and I/O error messages.

The following is a summary of these Help items:

- Help Topics
- Current Overlay
- Current Prompt
- Error Message
- I/O Navigator
- About VT220

The **Help Topics** menu item will display the help topics for VT220 only if you have selected a user defined terminal type (as defined as the 'Other' VT220 type from the MAT system Properties Communications tab). Otherwise, it will display the help topics for the Meridian 1 system.

The **Current Overlay**, **Current Prompt** and **Error Message** menu items are only enabled if you are running a VT220 terminal emulation for the M1.INI terminal type and the system is in overlay mode.

The I/O Navigator **Help** function allows you to obtain information on specific error messages.

The **Overlay Enhancer** is an online context sensitive help function which allows you to obtain quick and direct access to overlay information while in an active terminal session with the Meridian 1.

The following Overlay Enhancer Help commands appear in the Help drop-down menu:

- Current Overlay
- Current Prompt
- Error Message

The **Current Overlay** and **Current Prompt** commands are only available if an overlay program is loaded and the terminal session is of type 'Meridian 1', 'PPP', or 'Ethernet'. Otherwise, they will be disabled and will appear grayed. The **Error Message** command will be available if the terminal session is of type 'Meridian 1', 'PPP', or 'Ethernet'. Otherwise, it will be disabled and will appear grayed.

Note: Selecting an error message in the VT220 window is not sufficient to access the Overlay Enhancer help. Unlike the Overlay Passthru application which displays online help when you double-click the error message, the VT220 help requires that you first double-click the error message and then click **Error Message** from the Help drop-down menu. This will then display help for the selected error message

Keyboard mappings

VT220 uses standard keyboard mappings which, when incorporated into a terminal session, will match the appropriate VT keys and actions. These default mappings, as shown in the following tables, allow you to run a terminal emulation session using the appropriate keys on a standard 101 or 102-key keyboard.

For example, if you are using VT220 to run Meridian Mail, the Meridian Mail softkeys (which appear at the bottom of the menus and screens) will correspond to the appropriate function keys on your keyboard. The Meridian Mail softkeys correspond to the function keys F6 through F10 on a standard 101 or 102-key keyboard. Therefore, in a Meridian 1 session, you would press F6 to select Softkey 1, F7 to select Softkey 2, etc. For more information on the Meridian Mail softkeys, refer to the *Meridian Mail System Administration Guide*

The following tables list the keyboard mappings for VT220 on standard 101 and 102-key keyboards.:

Table 1
Keyboard mappings - VT key

VT Key	PC Key
PF1	Num Lock
PF2	Numpad Slash
PF3	Numpad Start
PF4	Numpad Minus
Find	Insert
Insert	Home
Select	Delete
Up Arrow	Up Arrow
Down Arrow	Down Arrow
Left Arrow	Left Arrow
Right Arrow	Right Arrow
F6	F6
F7	F7
F8	F8
F9	F9

Table 1 (Continued)
Keyboard mappings - VT key

VT Key	PC Key
F10	F10
F11	F11
F12	F12
F13	Sys Rq
F14	Scroll Lock
Help	F2
Do	F3
F17	Ctrl-F7
F18	Ctrl-F8
F19	Ctrl-F9
F20	Ctrl-F10

Table 2
Keyboard mappings - VT action

VT Key	PC Key
Remove	Page Up
Next Screen	Page Down
Prev Screen	End
Hold Screen	F1
Compose	Unmapped
Delete	Backspace
Keypad Command	Numpad Plus
Keypad Enter	Numpad Enter
Break	F5
Long Break	Shift-F5
Control Break	Ctrl-F5
Print Screen	Unmapped
Keypad 0	Numpad 0
Keypad 1	Numpad 1

Table 2 (Continued)
Keyboard mappings - VT action

VT Key	PC Key
Keypad 2	Numpad 2
Keypad 3	Numpad 3
Keypad 4	Numpad 4
Keypad 5	Numpad 5
Keypad 6	Numpad 6
Keypad 7	Numpad 7
Keypad 8	Numpad 8
Keypad 9	Numpad 9
Keypad Minus	Ctrl-Numpad Minus
Keypad Period	Numpad Del

Table 3
Keyboard mappings - VT action scroll

VT Key	PC Key
Scroll Left	Ctrl-Left Arrow
Scroll Right	Ctrl-Right Arrow
Scroll Up	Ctrl-Up Arrow
Scroll Down	Ctrl-Down Arrow

Using PC Event Log

The PC Event log displays recent MAT activities and events generated on the PC. The PC Event log displays active events in a way that lets you quickly view the most important events.

Using the PC Event window

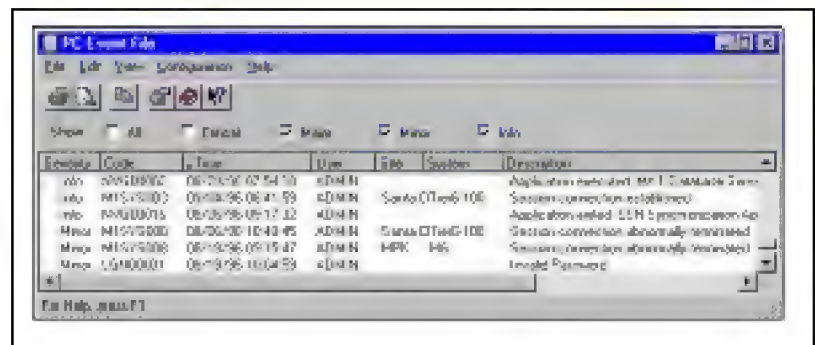
Once you open the PC Event window, you can perform the following tasks:

- Locate an alarm in the Event file to identify the cause of the problem
- Learn more detail about an alarm

Launching and using the PC Event window

From the **Maintenance** menu of the Navigator window, select **PC Events**. The PC Event window provides a list of events and a menu bar from which you can learn more about the events.

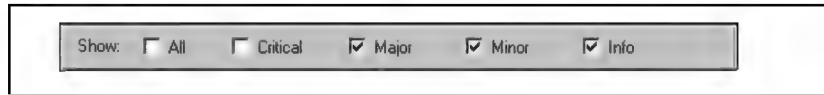
Figure 39
PC Event window



Filter toolbar checkboxes

Use the Filter toolbar to select the types of events that you wish to display in the list. Figure 40 shows the Filter toolbar. Click to check (or uncheck) an item. For example, you would check “Critical” to restrict the list to events that are critical. The Filter Toolbar may be dragged to the top or bottom of the window.

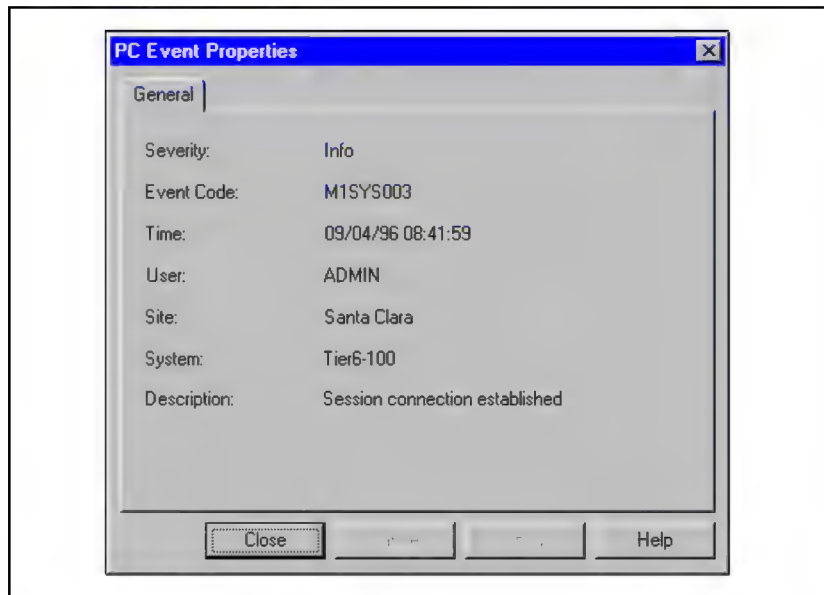
Figure 40
Filter toolbar



Learning more detail about an event

You can learn more about a selected event by choosing **Properties** in the **File** menu or clicking the **Properties** button in the popup menu.

Figure 41
PC Event Properties sheet



Appendix A: Script File Summary

This appendix contains a list of all of the script files used for the MAT applications. A script is a pre-written program which contains a set of commands and functions required to perform specific activities. Some scripts are defined for specific PC and Meridian 1 configurations and are therefore selected based on each user's configuration. Most MAT scripts, however, are defined for the general operation of the MAT applications and are therefore automatically selected to perform specific functions within MAT.

Common Services scripts

The following script files are used by the MAT Common Services applications. They are automatically selected whenever you run MAT and apply to all of the MAT applications as a whole. You do not need to select these script files to perform a required function.

HAYESMDM.SCR	Functional script used by Common Services applications (except for Call Accounting and Call Tracking) for connection with Hayes compatible modems
CUSTMDM.SCR	Functional script used by Common Services applications (except for Call Accounting and Call Tracking) for connection with customized modems
DSMODEM.SCR	Functional script used by Call Accounting for connection with customized modems
M1MODEM.SCR	Functional support script used to access far-end equipment (e.g., dispatcher modems)
ERROR.SCR	Functional script required for error handling

Traffic Analysis scripts

The script files used by MAT Traffic Analysis provide the main functions required for traffic data collection and report generation. The data collection script files are selected when you enter your Meridian 1 and communications parameters. The report generation script files are automatically selected when you generate reports.

Real time traffic data collection

The following script files are used for real time traffic data collection (no buffer unit). They will be automatically selected when you set up this site for real time traffic data collection (from the MAT Site Configuration application).

LD2.SCR	Main traffic data collection scripts
LD2INI.SCR	Functional script used by LD2.SCR (used to initialize Meridian 1 to have collection performed hourly)
LOGSL1.SCR	Functional script used by LD2.SCR

Traffic data collection from MDR-2000

The following script files are used for traffic data collection from an MDR-2000 buffer unit. They will be automatically selected when you set up this site for traffic data collection through the MDR-2000 buffer unit (from the MAT Site Configuration application).

M2K.SCR	Main traffic data collection script
M2KINI.SCR	Functional script used by M2K.SCR (used to initialize Meridian 1 to have collection performed hourly in pass-through mode)

Traffic data collection from PollCat II/III

The following script file is used for traffic data collection from the PollCat II/III buffer units. It will be automatically selected when you set up this site for traffic data collection using the PollCat II/III buffer units (from the MAT Site Configuration application).

POLL.SCR	Main traffic data collection script
----------	-------------------------------------

Traffic data collection from AT1/AT2

The following script files are used for traffic data collection from the AT1 and AT2 buffer units. They will be automatically selected when you set up this site for traffic data collection using the AT1 or AT2 buffer units (from the MAT Site Configuration application).

TSB1.SCR	Main traffic data collection script for AT1 buffer unit
TSB2.SCR	Main traffic data collection script for AT2 buffer unit

Traffic data collection from Sentinel 2000

The following script file is used for traffic data collection from the Sentinel 2000 buffer unit. It will be automatically selected when you set up this site for traffic data collection using the Sentinel 2000 buffer unit (from the MAT Site Configuration application).

SNLTRAF.SCR	Main traffic data collection script
-------------	-------------------------------------

Traffic Analysis report generation

The following script files are used for report generation. They are automatically selected when you generate Traffic Analysis reports.

AUXPLK.SCR	AVGSOA.SCR	CALPRK.SCR	CBKQUE.SCR
CONSOL.SCR	CSAML1.SCR	CSAML2.SCR	CSAML3.SCR
CSAML4.SCR	CSAML5.SCR	CSAML6.SCR	CSAMLK.SCR
CUSCON.SCR	DCHANL.SCR	DTDLAY.SCR	DTNSPD.SCR
FEAKEY.SCR	GLOBAL.SCR	GLPCCS.SCR	GLPTRF.SCR
GMSGAP.SCR	GNTLPS.SCR	GOHQUE.SCR	GPCLTB.SCR
GPROCL.SCR	GROUTL.SCR	GSUTRF.SCR	GTRNKS.SCR
ICONSL.SCR	IMTCHL.SCR	INPMMSG.SCR	INTRKG.SCR
ISDNPD.SCR	ISDNPM.SCR	ISDNPT.SCR	JCTRAF.SCR
JCTRGP.SCR	LPTRAF.SCR	MSGATQ.SCR	NCOSVC.SCR
NETLPS.SCR	NETWKS.SCR	NTATSV.SCR	OHKOVT.SCR
OHKQUE.SCR	OMTCHL.SCR	OUTMSG.SCR	PCTLTB.SCR
PRADIO.SCR	PROCLD.SCR	RADPAG.SCR	RTLREQ.SCR
TRVQUE.SCR	SELTRM.SCR	SLTRAF.SCR	SRADIO.SCR

SVCLPS.SCR	TMESSG.SCR	TRUNKS.SCR	TSETST.SCR
WATCON.SCR	WPRCLD.SCR	WTRNKS.SCR	

The following script files are used for the Data Parser as part of the report generation process. They are automatically selected when processing data for Traffic Analysis reports.

TFC000.SCR	TFC001.SCR	TFC002.SCR	TFC003.SCR
TFC004.SCR	TFC005.SCR	TFC007.SCR	TFC008.SCR
TFC10X.SCR	TFN001.SCR	TFN002.SCR	TFN101.SCR
TFS000.SCR	TFS001.SCR	TFS002.SCR	TFS003.SCR
TFS004.SCR	TFS005.SCR	TFS007.SCR	TFS007.SCR
TFS008.SCR	TFS009.SCR	TFS101.SCR	TFS102.SCR
TFS105.SCR	TFS41X.SCR	TRAFFIC.SCR	TRFCDR.SCR
TRFCUS.SCR	TRFSYS.SCR		

Call Accounting and Call Tracking scripts

The following script files are used by Call Accounting and Call Tracking to perform data collection and real time monitoring. Certain script files are automatically selected when you enter your configuration parameters in the MAT Site Configuration application. These represent the common scripts for data collection. As you define the SDI values in MAT Site Configuration, the appropriate script will be selected to match that option. When you then select an SDI value from the Call Accounting or Call Tracking Communications Database function, each defined script will be selected accordingly.

For example, if you define SDI1 to have real time CDR data collection performed from it, then SDI1 will be configured to run the real time CDR data collection scripts SL1.SCR and SL1LOGIN.SCR.

Call Accounting may require CDR data which is output from the Meridian 1 in different formats. In these cases, you must select **None** as the SDI value in the MAT Site Configuration function and then select the desired script file from the Communications Database function of Call Accounting.

Note: If you are collecting New format CDR data, then this option must be activated on the Meridian 1.

If you collect CDR data from a data file (e.g., if you select the File option from the Call Accounting or Call Tracking Communications Database), then you can select the filename from which you will collect the CDR data and then select a script filename for that particular format of CDR data. For example, if you select a file for data collection which contains normalized CDR data, then you would select the script file COLLECT.SCR.

Real time CDR data collection

The following script files are used for real time CDR data collection from the Meridian 1; no buffer unit is required.

SL1.SCR	Real time data collection script for Old format CDR
SL1NEW.SCR	Real time data collection script for New format CDR
SL1NEWX.SCR	Real time data collection script for New format CDR; supports X11 Release 23
SL1EURO.SCR	Real time data collection script for New format CDR with Periodic Pulse Metering
SL1EUROX.SCR	Real time data collection script for “New” format CDR with Periodic Pulse Metering; supports X11 Release 23
SL1LOGIN.SCR	Functional script used by above-mentioned data collection scripts

CDR data collection from MDR-2000

The following script files are used for data collection from an MDR-2000 buffer unit.

COLLECT.SCR	Data collection script which collects Old format CDR from MDR-2000 to produce normalized CDR (erases contents of buffer)
COLLECTX.SCR	Data collection script which collects New format CDR from MDR-2000 to produce normalized CDR (erases contents of buffer); MDR-2000 requires a chip which is compatible with X11 Release 23

2000FD.SCR	Data collection script which monitors in real time Old format CDR from an MDR-2000
2000FDX.SCR	Data collection script which monitors in real time New format CDR from an MDR-2000; MDR-2000 requires a chip which is compatible with X11 Release 23

CDR data collection from PollCat II/III

The following script files are used for data collection from the PollCat II/III buffer units.

POLLCDR.SCR	CDR data collection script for PollCat II/III buffer units
PARSESL1.SCR	Functional script used by POLLCDR.SCR
POLLNEWX.SCR	CDR data collection script for PollCat II/III buffer units; supports X11 Release 23
NEWCDRX.SCR	Functional script used by POLLNEWX.SCR

CDR data collection from AT1/AT2

The following script files are used for data collection from the AT1 and AT2 buffer units.

AT1CDR.SCR	CDR data collection script for AT1 buffer unit
AT2CDR.SCR	CDR data collection script for AT2 buffer unit
PARSESL1.SCR	Functional script used by AT1CDR.SCR and AT2CDR.SCR script files
AT1NEWX.SCR	New format CDR data collection script for AT1 buffer unit; supports X11 Release 23
AT2NEWX.SCR	New format CDR data collection script for AT2 buffer unit; supports X11 Release 23
NEWCDRX.SCR	Functional script used by AT1NEWX.SCR and AT2NEWX.SCR script files

CDR data collection from SEB II

The following script files are used for data collection from the SEB II buffer unit.

SEB.SCR	CDR data collection script for SEB II buffer unit
PARSESL1.SCR	Functional script used by SEB.SCR script file
SEBNEWX.SCR	New format CDR data collection script for SEB II buffer unit; supports X11 Release 23
NEWCDRX.SCR	Functional script used by SEBNEWX.SCR script file

CDR data collection from Sentinel 2000

The following script files are used for data collection from a Sentinel 2000 buffer unit.

SNLCDR.SCR	CDR data collection script for Sentinel 2000 buffer unit
SNLCDRX.SCR	CDR data collection script for Sentinel 2000 buffer unit; supports X11 Release 23

Call Tracking alarm scripts

The following script files are used for Call Tracking alarms. They will be automatically selected when you define the Call Tracking alarms.

CMALARM.SCR	Call Tracking alarm script
CMPAGER.SCR	Call Tracking alarm pager script

CDR data collection modem scripts

The following script files are supporting function scripts used by all CDR data collection scripts for Call Accounting and Call Tracking. The appropriate script will be automatically used when you select Hayes or Custom as the format for the modem for CDR data collection from the MAT Site Configuration application.

If you enter custom modem information when setting up a site, then the custom modem script file will be updated with the appropriate parameters.

HAYES.SCR	Functional script used by all CDR data collection scripts in Call Accounting and Call Tracking for connection with Hayes compatible modems
CUSTOM.SCR	Functional script used by all CDR data collection scripts in Call Accounting and Call Tracking for connection with customized modems (updated with correct parameters)

Script usage table

The following table lists the types of scripts which would be selected for different scenarios for Call Accounting and Call Tracking. These represent the main scripts which can be selected to suit a particular scenario. All other scripts will automatically selected depending on these script selections.

Table A-1
Script usage table

To	Use
Perform real time CDR data collection from Meridian 1	SL1.SCR
Collect CDR from MDR-2000 buffer unit	COLLECT.SCR
Collect CDR from PollCat II/III buffer units	POLLCDR.SCR
Collect CDR from AT1 buffer unit	AT1CDR.SCR
Collect CDR from AT2 buffer unit	AT2CDR.SCR
Collect CDR from SEB II buffer unit	SEB.SCR
Collect CDR from Sentinel 2000 buffer unit	SNLCDR.SCR

Meridian Administration Tools
Common Services
User Guide

© 1997,1998 Northern Telecom

All rights reserved

Information is subject to change without notice.

Northern Telecom reserves the right to make changes in design or components as progress in engineering and manufacturing may warrant. This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC rules, and the radio interference regulations of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Meridian 1 is a trademark of Northern Telecom.

Publication number: P0876405

Document release: Standard

Date: July 1998

Printed in the United States of America